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The impact of Legal Pluralism in Traditional Societies:
The Case of Papua New Guinea

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Abstract

This paper reviews the literature on legal pluralism and legal transplants, derives an economic model of legal pluralism and its effect on crime. It then applies the model to legal Pluralism in Papua New Guinea by both looking at customary law and its interaction with the state law. Finally it considers the case of distant legal transplants as a co-ordination game between adherents of two legal orders. The conclusions drawn from this work suggest that traditional knowledge, in the form of customary law, can have the effect of increasing the control of crime or decreasing it, when it interacts with the state legal order. A significant factor in determining whether the effect is positive or negative depends on the level of distance between the two legal orders.

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Introduction

The Independent State of Papua New Guinea, with an estimated population of 6.3 million people, consists of the eastern half of the Island of New Guinea². It has a vibrant parliament, and has remained democratic since Independence, with high voter turn-out and peaceful changes of government. However, it is a poor country and around 40 per cent of Papua New Guinea's population are estimated to live on less than one dollar a day, and average per capita income is estimated to be \$850 dollars per year.³ It has the third highest rural population rate in the world at 87 per cent.⁴ Life expectancy at birth is 57 years. Its current rank on the Human Development Index is 145 from 177 countries.⁵

It also has a serious crime problem and its cities are some of the most violent in the world.⁶ The most commonly cited reasons for high levels of crime in Papua New Guinea are high rates of unemployment and poverty, and a lack of crime fighting resources, including police numbers, poor policing practices, and a lack of training and equipment⁷. This paper will explore whether the type of legal pluralism found in Papua New Guinea, which sees the co-existence of two very distant legal orders, plays a part in generating high levels of crime. This is so, as many acts considered virtuous or permissible under customary law are considered illegal under the state law, particularly in the area of customary law enforcement. This can lead to a situation where an activity can be simultaneously rewarded by one legal order and punished by the other leading to conflicting incentives, confusion, disorder and an increase in crime. That is, traditional knowledge and culture is directly challenged by the state.

² The western half of the island was subsumed into Indonesia in 1969 after a period of colonisation by Dutch.

³ Per capita income data from World Development Indicators database, April 2009. Poverty headcount data from AusAid at www.ausaid.gov.au/country/papua.cfm.

⁴ According to the World Bank, Burundi has the highest rural population rate at 90 per cent, followed by Uganda at 88 per cent. A rural population rate approaching 90 per cent is high even for a low income country. Low income countries have an average have a rural population of 69 per cent. This is in contrast to middle and high income countries that have rates of 47 and 22 per cent respectively. World Development Indicators: World Development Indicators database, April 2009

⁵ See United Nations Human Development Index website at <http://hdr.undp.org/en/statistics/>.

⁶ Foreign Policy recently listed Port Moresby as one of its five Murder Capitals of the World in 2009, See http://www.foreignpolicy.com/story/cms.php?story_id=4480

⁷ For example, see Theodore Leventis, Crime Pays, Pacific Economic Bulletin who cites the fact that despite PNG's mountainous terrain it has a fraction of the police of Singapore, or Sinclair Dinnen, in Handbook of Restorative Justice who cites the fact that the police per population in PNG has fallen to a third of what it was at the time of Independence. He also cites many examples of police incompetence and poor training and that they are often outgunned by criminal 'raskol' gangs. Unemployment in Port Moresby and many Indigenous communities in Australia is often estimated to be above 60 per cent. However, this is an overstatement as many people are informally employed.

With at least 853 different languages spoken, Papua New Guinea is probably the most ethnolinguistically diverse country in the world.⁸ One commentator suggests that Papua New Guinea may have more than one thousand ethnic groups.⁹ Within these ‘tribal’ groupings are ‘clans’ or extended family groupings. The loyalty displayed to one’s own clan or tribe is often referred to as the *wontok*¹⁰ system. Under the *wontok* system, primary loyalty belongs to the people of his or her family, clan and tribe over any other grouping, including the state.

At the time of European contact the population led a subsistence lifestyle using rudimentary agricultural techniques that included the domestication of pigs and the cultivation of taro and other root crops. Society was made up of thousands of small ‘stateless’ tribal units consisting of around 200 to 500 people.

Political and security functions were subsumed in social relations, underlying the importance of the family, clan and tribe. It seems that there was a high degree of egalitarianism and little social stratification, and that land was communally owned. For example, after a search, the first Administrator of British New Guinea, William MacGregor, was unable to find any individuals who he could classify as real ‘chiefs’, as he found during his previous posting in Fiji.¹¹ Clan leaders (or big men) earned their status through their oratory and fighting skills and maintaining it through largesse. Women were generally subordinated and often married into neighbouring communities. Both violence and compensation payments were commonly used to correct wrongdoing and group liability was often applied. It seems that there was a high degree of inter group conflict, at least in the Highlands at the time immediately preceding European contact. Most early European accounts speak of fierce tribal fighting, cannibalism and sorcery.¹²

Papua New Guinea has had a complex colonial history, not least because it had three colonial rulers in a period of less than 100 years; first the British and the Germans, and then the Australians.¹³ In relation to the practice of traditional customary law, while various statutes said otherwise, Papua New Guineans were generally permitted to live by their ‘traditional’¹⁴ ways and customs up until the 1960s. Where these were in conflict with statute and brought to the attention of the colonial authorities and courts the offenders were treated leniently. But generally, there was a system of legal bifurcation where the European population lived by the

⁸ B. Reilly, *Ethnic conflict in Papua New Guinea*, Asia Pacific Viewpoint, Vol. 49, No. 1, April 2008.

⁹ S. Levine, *Culture and conflict in Fiji, Papua New Guinea, Vanuatu, and the Federated States of Micronesia*, in M.E. Brown and S. Ganguly (eds), *Government policies and ethnic relations in the Asia Pacific*, pp 457-508. (Cambridge and London, MIT Press, 1997).

¹⁰ The etymology for ‘wontok’ in Tok Pisin is literally ‘one talk’ or ‘same language’ referring to one’s own clan or tribe.

¹¹ See M. Goddard, *Substantial Justice: An Anthropology of Village Courts in Papua New Guinea*, (Berghahn Books, 2009), p31

¹² See G. W. Trompf, *Payback: The Logic of Payback in Melanesian Religions* (CUP, 1994).

¹³ The following account is a synthesis from J. Nonngorr, *supra* n. 15, Y Ghai, *supra* n.15 and G. Woodman, *supra* n.15 and D. Weisbrot: *Integration of Laws in Papua New Guinea: Custom and Criminal Law in Conflict in Law and Social Change in Papua New Guinea* (eds) D. Weisbrot, A. Paliwala, and A Sawyerr (Butterworths 1982).

¹⁴ Clearly custom changes over time and this will be discussed later in the chapter.

transplanted law, and the indigenous population lived by their traditional custom. However, by the late 1960s, there were serious efforts to unify the criminal justice system and subject the population to the transplanted criminal law, the Criminal Code, which was a direct transplant from the Australian state of Queensland¹⁵. This saw a number of customary rules and principles made criminal and punishable under state law. Where customary rules were not made illegal they were often considered immoral and discouraged by schooling, religious instruction and various public education programs.

Despite efforts to discourage and eliminate a key element of traditional knowledge and culture, customary law, it often survived and even flourished alongside, and often in opposition, to state law. Customary law practices that have been long outlawed by the state, such as group liability, demands for compensation and violent retribution or 'payback' are common in both rural and urban areas.¹⁶

Review of Literature: legal pluralism and legal transplants

While William Twining tells us that legal pluralism is a 'social fact'¹⁷, Brian Tamanaha that 'it is everywhere'¹⁸, and John Griffiths that it is the 'omnipresent, normal situation in human society'¹⁹ few, if any, scholars can agree on a definition. This has led Tamanaha conclude that, 'the notion of legal pluralism has been marked by deep conceptual confusion and unusually heated disagreement'²⁰ Sally Moore also considers that legal pluralism can be 'analytically blurring'²¹. The confusion, disagreement and conceptual blurring is no doubt partly driven from the fact that participants come from several disciplines, bring different concepts with them and often have specific technical languages. Twining suggests that such diversity is hardly surprising, given that different disciplines often have very different research questions they wish to answer. For instance, he notes that much of the early analysis focused on small communities at the sub-national level where the range of subject matters and

¹⁵ The Queensland Criminal Code (or Griffith Code) was authored by Sir Samuel Griffith who at differing periods of his life served as Premier of Queensland, Chief Justice of the Queensland Supreme Court, the first Chief Justice of Australia, and the principal drafter of the Australian Constitution. The Code was made law in Queensland in 1899 and is still largely unchanged.

¹⁶ For example see Pitts (2001) P 131 who notes 'Some 'traditional' controls however are crimes against the state. They may include tribal fighting and revenge attacks (payback) which can manifest in burglaries, car thefts, muggings, killings or sorcery. One only need read the Post-Courier or National newspapers to gain an appreciation of the magnitude of intertribal killings and attacks in urban centres such as Port Moresby.

¹⁷ W. Twining, *Globalisation and Legal Theory* (2000), p.83.

¹⁸ Brian Z Tamanaha, *Understanding Legal Pluralism: Past to Present, Local to Global*, *Sydney Law Review*, Vol 30 pp375-411, 2008 (p375).

¹⁹ John Griffiths, *What is Legal Pluralism?* *Journal of Legal Pluralism and Unofficial Law* 1986, 24, p39.

²⁰ Brian Z Tamanaha, *Understanding Legal Pluralism: Past to Present, Local to Global*, *The Julius Stone Address 2007 in the Sydney Law Review* 2008, Vol 30: 375-411, p390

²¹ Sally Falk Moore, *Enforceable Rules Inside and Outside the Formal Law*, in *Law and Anthropology: A Reader* (ed) Sally Falk Moore, Blackwell, Malden, MA, 2005, p247

actors was very different to those issues and actors concerning, for example, international law.²²

Legal pluralism has many definitions: they include ‘legal systems, networks or orders co-existing in the same geographical space’²³; ‘..the co-existence of multiple legal orders and multiple systems or bodies of rules..’²⁴; ‘different legal mechanisms applicable to the same situation’²⁵; ‘different rules for identical situations’²⁶; ‘..multiple uncoordinated, coexisting or overlapping bodies of law’²⁷; ‘a situation in which two or more legal systems coexist in the same social field’²⁸; ‘an irreducible set of legal orders that can partly be in harmony, partly in contest with each other’²⁹; and ‘semi-autonomous social fields’³⁰. Continued disagreement over the term has recently led John Griffiths, the author of the seminal paper on legal pluralism, to now suggest giving up ‘law’ and ‘legal pluralism’ as concepts because they focus efforts on definitional matters and because they suggest a difference between law and other normative orders, and rather the focus should be on what people treat as law.³¹ However, given the diversity of definitions and a tendency to use the term to describe many different phenomena, some space is needed to acknowledge the conceptual complexities of legal pluralism theory and clarify the term for the purposes of this paper.

Any of the definitions that involve the term ‘legal’ and ‘law’ run straight into the much vexed issue of defining ‘law’. Therefore, the group of definitions that has at its core ‘more than one legal system’ is limited, as scholars cannot agree on what *is* ‘law’ what is *not* ‘law’. At the extremes, some authors treat all enforceable norms as ‘law’ while others wish to include only the state legal system which has the force of government.³²

Taking a too narrow definition of law would result in not recognising the key rules and institutions for ordering relations and maintaining social order in many societies, and therefore severely limits the scope of analysis. If one takes this narrow definition of law then the circumstances of legal pluralism would be mainly be concerned with inter-jurisdictional matters concerning international and federal law. A narrow definition would not include the interaction of state law with customs and norms enforced by social sanction, and would

²² W. Twining, Legal Pluralism 101, (2010), p15.

²³ W. Twining, Globalisation and Legal Theory (2000), p. 83.

²⁴ W. Twining, Globalisation and Legal Theory (2000), p. 224.

²⁵ J Vanderlinden in John Griffiths, What is Legal Pluralism? Journal of Legal Pluralism and Unofficial Law 1986, 24, p14

²⁶ J Vanderlinden in John Griffiths, What is Legal Pluralism? Journal of Legal Pluralism and Unofficial Law 1986, 24, p14

²⁷ Brian Z Tamanaha, Understanding Legal Pluralism: Past to Present, Local to Global, The Julius Stone Address 2007 in the Sydney Law Review 2008, Vol 30: 375-411, p375

²⁸ Sally Merry (1988: 870 cf. Griffiths 1986:2 and Goddard, p19.)

²⁹ Griffiths in Ralf Michaels, Global Legal Pluralism, Duke Public Law and Legal Theory Research Paper Series No.259, July 2009, p5

³⁰ Moore, Sally F 1978 in J. Griffiths What is Legal Pluralism, p36

³¹ Ralf Michaels, Global Legal Pluralism, Duke Public Law and Legal Theory Research Paper Series No.259, July 2009, p12. Griffiths (2005, pp63-64)

³² Griffiths, J, 1986, What is Legal Pluralism? Journal of Legal Pluralism and Unofficial Law 24.

therefore be inadequate for analysing why and how people are motivated to follow certain modes of behaviour and the consequences of such behaviour. One way out of the problems associated with a narrow definition of law, is to talk of ‘normative pluralism’, where state laws are a subset, or to consider that one of the norms is to obey the state law. In such a case, legal pluralism can be seen as a species of normative pluralism.³³ The benefit of a narrow definition of law in the context of normative pluralism is that allows a clear definitional distinction to be made between the state law and custom and societal norms. However, one problem with a narrow definition of law is that it may imply a hierarchical relationship between state law and custom, when in fact no such relationship exists, and a horizontal relationship may be a much more apt way to consider the relationship. A narrow definition of law, may also be said to undervalue (and undermine) custom and norms, through the use of language.

However, if the definition of ‘law’ is too broad we run the risk of losing meaning and analytical rigour. Indeed, as Sally Merry asks, ‘Where do we stop speaking of law and find ourselves simply describing social life?’³⁴ Separating legal institutions from other social institutions is difficult, particularly at the border. In an effort to bring clarity, Twining considers a legal order can be said to exist where one can identify:

[A]n institutionalized system, agglomeration or group of social practices and norms that are oriented towards ordering relations between persons (legal subjects) at one or more levels of relations and of ordering.³⁵

Twining’s definition of the term *legal order* is broad enough to include state law, custom and norms, and also helps us to sort out the borderlines cases, based on the purpose of the social practices; that is whether they are aimed towards the *ordering of relations between persons*, or not. One problem with Twining’s definition is that it may be too broad, and therefore not adequately allow for more than one legal order in a given society, that is pluralism of legal orders. If *one* legal order can be an agglomeration of social practices and norms, what separates this legal order from other legal orders in the same society? It seems under this definition, a society, even if it has the telltale signs of legal pluralism, could be categorised as only having one legal order. One potential way around this problem would be to talk of a *set* of social practices and norms, indicating some degree of self-containment or autonomy in the bundle of social practices and norms that make up a legal order.

Another approach to the definitional problems associated with legal pluralism is attempting to obviate from the need to define law or a legal order, or at least to make it a secondary consideration. Sally Moore’s definition of legal pluralism as ‘semi-autonomous social fields’, to some extent does this. Moore defines a semi-autonomous social field as ‘an identifiable

³³ W. Twining, Normative and Legal Pluralism: A Global Perspective. The Seventh Annual Herbert L. Bernstein Memorial Lecture in International and Comparative Law. As held at Duke University School of Law, April 6, 2009. This is the central theme of this paper, see pp1-3.

³⁴ Sally Merry 1988: 878 (in Gibson 2009 p19)

³⁵ W. Twining, Diffusion of Law: A Global Perspective, p12 (footnote 22).

social group which engages in reglementary activities' where all reglementation by the social field is, for purposes of a theory of legal pluralism is 'law'.³⁶ Moore's definition allows for the fact that a social field '...can generate rules and customs and symbols internally, but that it is also vulnerable to rules and decisions and other forces emanating from the larger world by which it is surrounded'.³⁷ Moore highlights the essence of legal pluralism below:

The rules and institutions attached to governments are only one category of a vastly more extensive set of sites producing rules and obligations....In our society, rules are made by legislatures and enforced by the state are only one piece of the existing system of obligatory norm. There are many other ways in which enforceable rules are created, some of which intersect with the formal system.... Others include rules made by companies, schools, universities. Often non-official rules are socially enforced...Members of the social milieu must conform or get out. ..An organization can expel.....a member, and a business person may not want to do business with someone who does not play the game. Thus the capacity for enforceable rule making is not found in the courts alone, nor in the legislature, nor in administrative agencies, nor in the police, but also in myriad unofficial sites of policy making. Norm setting and enforcing is found in many legitimate social settings outside of government, and is also found in illegal organizations.... In anthropology, when a multiplicity of enforceable rule systems operate concurrently this circumstance has been called 'legal pluralism'.³⁸

Moore's 'anthropological' definition, 'a multiplicity of enforceable rule systems operate[ing] concurrently', is both sharp and simple. Furthermore, the use of the term 'enforceable rules' reduces the need to define 'law', or at the least allow a very broad definition to capture most rewards and sanctions that affect human interactions. Therefore it is also useful in that it is consistent with Douglass North's concept of institutions; they being the 'rules of the game in a society'³⁹, or 'constraints that shape human interaction'. North considered that institutions structure the incentives associated with human exchange, whether it is political, social, or economic. It should be noted that when North refers to incentives, he is speaking of *both* reward and sanction.

It is the incentive structure, rewards and sanctions, that a person or group of people face, and how this may differ as a result of legal pluralism, that is the focus of this paper. Therefore a modified version Moore's 'anthropological' definition that brings out both the overlap of rules and the effect on an individual seems appropriate. That is, legal pluralism occurs 'when an individual faces the probability of at least two different rule

³⁶ Moore, Sally F 1978 in J. Griffiths What is Legal Pluralism, p36

³⁷ Moore, Sally F 1978 in J. Griffiths What is Legal Pluralism, p29

³⁸ Sally Falk Moore, Enforceable Rules Inside and Outside the Formal Law, in Law and Anthropology: A Reader (ed) Sally Falk Moore, Blackwell, Malden, MA, 2005, p246

³⁹ Douglass C. North, 1990, Institutions, Institutional Change and Economic Performance, Cambridge University Press, p3

systems being enforced for the same action in the same location'. For those who live in such circumstances (all of us to some extent), the incentive structure associated with our actions is multilayered, and at times conflicting.

Legal Transplants

Over the last ten years, economists have devoted considerable attention to legal transplants; in particular the consequences of civil law versus common law transplants. 'Legal origins theory' pioneered by the work of Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishney (La Porta *et al*), has led to an explosion of cross country econometric work aimed at exploring the consequences of civil law transplants versus common law transplants on a variety of outcomes; including economic growth, pollution levels, corruption and many others.⁴⁰ All other things being equal, these studies conclude that common law transplant countries have better economic outcomes than civil law transplant countries. Based on numerous cross country surveys, by various authors, La Porta *et al* have recently concluded these results are due to common law transplants providing better investor protection, lighter government ownership and regulation, and less formalised and independent judicial systems.⁴¹

Such findings have exasperated many legal scholars, who have strongly criticised their findings. Ralf Michaels has three major criticisms with the legal origins literature.⁴² First, he considers the work as too simplistic in comparing civil versus common law when there are far more important differences such as the 'laws of Western and non-Western, or developed and developing countries'⁴³. Second, he considers they do not take law seriously: in their latest work La Porta *et al* suggest that common law stands for 'the strategy of social control that seeks to support private market outcomes, whereas civil law seeks to replace outcomes with state-desired allocations'⁴⁴. Third, that they do not adequately take account of legal

⁴⁰ For instance, see the vast bibliography to the survey paper by Refael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, *The Economic Consequences of Legal Origins*, *Journal of Economic Literature*, 2008, 46:2, 285-332.

⁴¹ La Porta, Lopez-de-Silanes and Shleifer (Nov 2007) *The Economic Consequences of Legal Origins*: p20 have recently concluded:

Compared to French civil law, common law is associated with a) better investor protection, which in turn is associated with improved financial development, better access to finance, and higher ownership dispersion, b) lighter government ownership and regulation, which are in turn associated with less corruption, better functioning labor markets, and smaller unofficial economies, and c) less formalised and more independent judicial systems, which are in turn associated with more secure property rights and better contract enforcement.

⁴² Ralf Michaels, *The Second Wave of Comparative Law and Economics*, *University of Toronto Law Journal*, 2009, 59.

⁴³ Ralf Michaels, *The Second Wave of Comparative Law and Economics*, *University of Toronto Law Journal*, 2009, 59. p200

⁴⁴ La Porta, Lopez-de-Silanes and Shleifer (Nov 2007) *The Economic Consequences of Legal Origins*: p286

transplants and the phenomenon of surface law⁴⁵. Indeed, Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard⁴⁶ noted that, ‘The most common complaint is that while the transplanted law is now on the books, the enforcement of these new laws is quite ineffective.’⁴⁷ It seems biggest problem lawyers have with the legal origins literature is that its exponents explicitly (or implicitly) assume that the transplanted law is accepted, enforced and effective in the society subject to the transplant, and largely ignore the phenomenon of legal pluralism. The failure to acknowledge legal pluralism in many former colonies, and the fact that traditional customary laws often carry more weight than, or at least are in competition with, the imported state law is a serious, and potentially fatal flaw in the legal origins literature.

The legal origins literature provides little or no insight into the phenomenon of legal pluralism brought about by distant legal transplants. While there *are* differences between common and civil law regimes, there are often far bigger differences between transplanted law and customary law in many societies. While Western transplanted colonial law differed considerably in content and application, it shared some general principles. These include: equality under the law for its citizens; a state monopoly on force and punishment; individual responsibility and culpability; a preference for the use of statutes and codes; the use of courts and trials; a distinction between civil and criminal matters; and a denial of supernatural causes of events. In contrast, many customary legal systems, particularly in Africa, the Pacific and parts of Asia are based on a very different set of principles. Kinship and the importance of ‘social distance’ are at the core of much customary law. Other differences include the elevation of the concept of self help, group liability, the absence of codification, no distinction between civil and criminal matters, and a belief that the supernatural can affect the physical world.

Legal transplants through conquest and colonisation are an ingredient in providing one of the best examples of legal pluralism. In societies subject to legal transplants individuals, often face the probability of least two enforceable rule systems, namely customary law and state law, being enforced in relation to their behaviour. Notable correlates with this type of legal pluralism are high levels of crime, disorder and low levels of economic growth.⁴⁸ Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard label the negative effects on the

⁴⁵ The term ‘surface law’ means different things to different people. For instance, it can be used to describe a situation where a law is only on the surface and not adhered to below or a situation where there is only information on the surface law and little is known of the laws and rules below the surface. William Twining, *General Jurisprudence: Understanding Law from a Global Perspective*, 2009, Cambridge University Press, Cambridge, px

⁴⁶ Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, *The Transplant Effect*, *The American Journal of Comparative Law* 51 2003

⁴⁷ Berkowitz (2003), p165

⁴⁸ See Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, *The Transplant Effect*, *The American Journal of Comparative Law* 51 2003

effectiveness of state legal institutions, or as they term it *legality*,⁴⁹ as the *transplant effect*.⁵⁰ Their explanation of why transplant countries perform poorly is as follows:

They may be unfamiliar with dispute settlement through adversarial litigation rather than mediation and negotiation or with the rigidity of legal rights independent of kinship relations or norms of social obligations. Moreover, the social, economic and institutional context often differs remarkably between origin and transplant country, creating fundamentally different conditions for effectuating the imported legal order in the latter. Transplant countries therefore are likely to suffer from the transplant effect, *i.e.* the mismatch between pre-existing conditions and institutions and transplanted law, which weakens the effectiveness of the imported legal order.⁵¹

They also suggest there is a lack of demand for the imported law as law is a ‘cognitive institution’. That is, there is much implied (or unwritten) knowledge within the imported legal system and this leads to legal practitioners having difficulty understanding and working with the imported state law.⁵² Therefore, as the imported law or its principles are not fully understood, it is not in high demand.

Their empirical work supports their hypothesis that the ‘mismatch’ between the pre-existing law and institutions and transplanted law severely weakens the effectiveness of the state law.⁵³ They consider that ‘if a transplant has familiarity with the country or countries from which it takes the formal legal order, and/or it transplants the formal legal order with significant adaptation to its initial conditions, then it is a receptive transplant.’⁵⁴ Based on this definition of a *receptive transplant* and their own classification of countries, they find a substantial negative impact of unreceptive transplants on legality, which in turn has a substantial indirect and overall impact on economic development.⁵⁵ Such a finding is a significant nuance in the legal origins literature; they consider their policy implications below as ‘fundamental’.

An effective legal reform strategy should include measures to adapt the law to local conditions and/or increase familiarity with the law before it is formally transplanted.⁵⁶

[W]hen the law is adapted to local needs, people will use it and want to allocate resources for enforcing and developing the formal legal order. Second, legal intermediaries responsible for enforcing and developing the formal legal order can be

⁴⁹ They define the key term ‘legality’ to be ‘the extensiveness and effectiveness of legal institutions’, p167

⁵⁰ Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, *The Transplant Effect*, *The American Journal of Comparative Law* 51 2003

⁵¹ Berkowitz et al (2003), p171

⁵² Berkowitz et al (2003), p177

⁵³ Berkowitz et al (2003), p171

⁵⁴ From this definition and dataset classify 11 countries as receptive transplants, and 28 as unreceptive transplants. Berkowitz (2003). P181

⁵⁵ Berkowitz (2003). P181

⁵⁶ Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, *The Transplant Effect*, *The American Journal of Comparative Law* 51 2003 p 188

more effective when they are working with a formal law that is broadly compatible with the pre-existing order, or which has been adapted to match demand.⁵⁷

While their policy conclusions may be ‘fundamental’, they are not particularly helpful. Where policy conclusions are most needed – in societies subject to unreceptive legal transplants, most notably in many parts of Africa and the Pacific, they are of little use. In particular, they offer no advice on what ‘measures to adapt the law to local conditions’. Furthermore, their list of receptive transplants for the statistical analysis (Australia, Belgium, Canada, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Argentina and Chile) are with the exception of Japan, European countries who adopted European transplants or are ‘new world countries’ where there was a massive influx of Europeans who effectively took their institutions with them. Therefore, their conclusions could be reinterpreted as countries who adopted a similar legal regime to their own social norms do better than ones who do not.

A significant problem with their work is the failure to deal adequately with the ‘distance’ between the imported law and the legal order before the transplant. The ‘mismatch’ of the pre-existing legal order and the transplanted legal law varies in magnitude. In some cases, the mismatch may be relatively minor, where laws and incentives differ minimally, whereas in other cases the difference may be substantial. Where a substantial mismatch occurs, the very principles that underpin the law may be starkly different, and adapting the transplanted law to local conditions may not be possible. As will be discussed later, European law, whether it is from a common or civil law tradition is vastly different from customary law based on tribalism. It is argued it is ‘distance’ between the two legal regimes rather than ‘receptive or unreceptive transplants’ that Berkowitz, Pistor and Richard are picking up, in which case may call for different policy conclusions, which will be discussed later. In essence, however, the work of Berkowitz, Pistor and Richard, a collaborative effort of an economist and comparative lawyers, suggests that legal pluralism brought about by a legal transplant that leads to a considerable mismatch between the state law and the customary law is problematic and should be ameliorated through harmonisation or unification. This view is shared by Robert Cooter who suggests the primary way to encourage individuals to obey the state law is to align the state law with the prevailing morality.⁵⁸

Highlighting the negative consequences of legal pluralism that result from transplants and a call for harmonisation between the state law and customary law is controversial among some circles. Many legal anthropologists have a ‘preference for plurality and locality over uniformity and universality’⁵⁹ and consider legal pluralism, whether it be brought about by legal transplants or some other means, as the ‘omnipresent, normal situation in human

⁵⁷ Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, *The Transplant Effect*, *The American Journal of Comparative Law* 51 2003 p 179

⁵⁸ Robert Cooter, *Do Good Laws Make Good Citizens? An Economic Analysis of Internalised Norms*, *Virginian Law Review*, Vol. 86, November 2008, No.8, 1577-1601, p1597.

⁵⁹ Ralf Michaels, *Global Legal Pluralism*, *Duke Public Law and Legal Theory Research Paper Series* No.259, July 2009, p2

society'⁶⁰. Indeed, Griffith takes issue with those who consider legal pluralism 'as an imperfect form of law' and those who call for unification or harmonisation of laws. He argues forcibly that the very concept of legal pluralism, as discussed above, (or 'weak pluralism' as he calls it) and the idea that customary law is (or is not) accommodated by the state is analytically flawed and driven by a 'legal centralist conception'. He argues:

It is a messy compromise which the ideology of legal centralism feels itself obliged to make with recalcitrant social reality: until the heterogeneous and primitive populations of ex-colonial states have, in the process of 'nation building', been smelted into homogeneous population of the sort which 'modern' states are believed to enjoy, allowances must be made. But unification remains the eventual goal, to be enacted as soon as circumstances permit.⁶¹

He asserts that '[l]egal centralism is a myth, an ideal, a claim, an illusion'⁶². Such a claim suggests that that while legal pluralism brought about by legal transplants may be stark; it should not be falsely compared with the idealised picture of law in western society where state law is the only effective law. Rather, state law is only one type of law, and it is 'often a secondary rather than primary locus of regulation' in all societies⁶³. Similarly, Watson argues that from a historical perspective, imitation and transplantation are the main methods for legal change, and that 'borrowing has been the most fruitful source of legal change in the Western world'⁶⁴, although importantly, he also acknowledges that these transplanted legal rules 'are frequently and for long stretches of time dysfunctional, ill adapted to meet the needs and desires of society at large, its ruling elite or any recognisable group'.⁶⁵

Many current leading jurists who write on the topic such as Twining, Santos, and Tamanaha are generally much more ambivalent than Griffith and other legal anthropologists when discussing legal pluralism and its consequences, albeit to differing degrees.⁶⁶ Twining rightly considers that the interaction of rules is complex, noting that '[s]ometimes they compete or conflict, sometimes they sustain or reinforce each other; often they influence each other through interaction, imposition, imitation and transplantation.'⁶⁷ He also notes that '[I]n the

⁶⁰ John Griffiths, What is Legal Pluralism? *Journal of Legal Pluralism and Unofficial Law* 1986, 24, p39.

⁶¹ Griffiths, What is Legal Pluralism? *Journal of Legal Pluralism and Unofficial Law* 1986, 24, p7-8

⁶² John Griffiths, What is Legal Pluralism? *Journal of Legal Pluralism and Unofficial Law* 1986, 24, p4.

⁶³ Marc Galanter, Justice in many rooms: courts, private ordering and indigenous law, *Journal of Legal Pluralism* 19, 1-47, 1981, p20.

⁶⁴ Alan Watson in R. B. Schlesinger, Hans W. Baade, Peter E. Herzog, E. M. Wise, *Comparative Law: Sixth Edition*, New York, Foundation Press, 1998, p13.

⁶⁵ Alan Watson in R. B. Schlesinger, Hans W. Baade, Peter E. Herzog, E. M. Wise, *Comparative Law: Sixth Edition*, New York, Foundation Press, 1998, p15.

⁶⁶ See comments by Twining and Tamanaha above. Santos considers that to his mind '...there is nothing inherently good, progressive, or emancipatory about legal pluralism.' See B. Santos, *Toward a New Legal Common Sense* (1995), 114-115. Of the three, Twining would seem to take the most positive (or least negative) view of legal pluralism.

⁶⁷ W. Twining, *Globalisation and Legal Theory* (2000), pp. 85-86.

early days of study of legal pluralism there was a tendency to think of co-existing legal orders in oppositional terms – as conflicting or competing.⁶⁸ He considers that to be a mistake, noting that:

Rather, the possible kinds of relations between co-existing legal orders can be extraordinarily diverse: they may complement each other; the relationship may be one of co-operation, co-optation, competition, subordination, or stable symbiosis; the orders may converge, assimilate, merge, repress, imitate, echo, or avoid each other.⁶⁹

There is no doubt that the interaction of differing legal orders is very complex, and produces many different results, some co-operative and other conflicting. Also, many of the arguments from Griffith and the legal anthropologists are hard to deny. They are right to suggest that there is nothing particularly new about legal pluralism, legal transplants, and the state being one of multiple contestants asserting 'law'. Legal pluralism *is* everywhere (to differing degrees), and state law is probably of secondary consideration for most individuals in transplant and non-transplant countries alike when considering actions. For instance, it seems reasonable to argue that most people do not commit murder, not because of fear of punishment by the state, but rather because they think it is wrong. Also, every state legal system is likely to contain at least some transplants or imitations, and this is a common way that law, be it state or otherwise, is developed and diffused.

However, it would seem to be wilful blindness not to acknowledge the chaotic consequences that can be generated through legal pluralism. Tamanaha puts a much greater emphasis on the conflicts associated with legal pluralism noting that:

Sometimes these clashes can be reconciled. Sometimes they can be ignored. Sometimes they operate in a complementary fashion. But very often they will remain in conflict, with serious social and political ramifications.⁷⁰

While the conceptual and definitional complexities of legal pluralism theory are very real, and deserve attention, as do descriptions and cases studies of communities subject to curious forms of legal pluralism. However, the focus on these areas to date has meant that the literature has very little meaningful to say on how the negative consequences of legal pluralism could or should be dealt with by policy makers or those suffering the consequences of it. The type of legal pluralism brought about by the colonisation of previously stateless societies, such as in Papua New Guinea, has led to clashes and ongoing conflict between legal orders. As will be explained later, some virtuous acts under customary law were considered crimes under the new state law, and vice versa.

⁶⁸ W. Twining, *Diffusion of Law: A Global Perspective*, p14

⁶⁹ W. Twining, *Diffusion of Law: A Global Perspective*, p15

⁷⁰ Brian Z Tamanaha, *Understanding Legal Pluralism: Past to Present, Local to Global*, The Julius Stone Address 2007 in the *Sydney Law Review* 2008, Vol 30: 375-411, p410

The following section aims to make a contribution to the literature by analysing legal pluralism from a law user's point of view using the tools of economic analysis and game theory. Such an approach poses legal pluralism as a co-ordination problem for those who adhere to or are subject to differing legal orders. Where the legal orders are *distant*, neither legal order may be able to provide an ordering function in society.

An economic model of legal pluralism and its effect on crime

Acknowledging that state law is only *one* set of rules that govern the behaviour of individuals and groups within a society is not new in the economic analysis of law. Both Jeremy Bentham and Adam Smith directly discussed the importance of norms, customs and religious convictions on peoples' behaviour and how this can clash with the law of the land.⁷¹ While the earliest economic analysis of the law discussed legal pluralism and the possibility of clashes, most of current the work looks at how 'norms' (which would include customary law in the economic literature) support and reinforce state laws, as it is generally assumed, either implicitly or explicitly, that the state law mirrors society.⁷² Under the rare occasion where there is acknowledgement that social norms can differ from state law there, the naïve prescription is that the state should simply penalise practices, or the groups that adhere to them, so as to eliminate inefficient norms.⁷³ Implicit is the presumption that the state is strong

⁷¹ Bentham considers the interaction between religious conviction and the laws of the sovereign, when discussing motive for action. He notes that religious conviction can motivate people to break laws. For example he states, 'In order to obtain the favour of the Supreme Being, a man assassinates his lawful sovereign'. He also observes that what might be considered pious in one house in England is called superstitious (or even impious) in another, when referring to the Catholic Church's doctrine of Transubstantiation. (An Introduction to the Principles of Morals and Legislation, Chapter X, XXIV,1, p112)

Adam Smith, devoted a book to the very subject of the interactions between formal laws and social norms and conscience, in 1759. The importance of social norms in regulating conduct is highlighted by Smith. He states:

Nature, when she formed man for society, endowed him with an original desire to please, and an original aversion to offend his brethren. She taught him to feel pleasure in their favourable, and pain in their unfavourable regard. She rendered their approbation most flattering and most agreeable to him for its own sake; and their disapprobation most mortifying and most offensive. (The Theory of Moral Sentiments, Part III, Chapter II (early on))

⁷² See Eric A. Posner (ed) Social Norms, Nonlegal Sanctions, and the Law: Economic Approaches to Law, 2007, Edward Elgar, Cheltenham, UK; Robert Cooter, such Do Good Laws Make Good Citizens? An Economic Analysis of Internalised Norms, *Virginian Law Review*, Vol. 86, November 2008, No.8, 1577-1601, p1591; Richard Posner, Social norms and the law: An economic approach, *The American Economic Review* 1997, 87(2), p365; Eric Posner, *Law and Social Norms*, 2002, Harvard, Mass.; and Stiglitz.

⁷³ Eric Posner, *Law, Economics and Inefficient Norms*, 144 U. Pa. L. Rev. 1697 (1995-1996)

enough to eliminate social norms it does not like and that there are no adverse consequences from such action.

Gani Aldashev, Imane Chaara, Jean-Philippe Platteau, and Zaki Wahhaj have recently produced one of the few works using economics to analyse legal pluralism explicitly and accounts for the interaction between the two legal orders. Their work suggests the non-state legal system will converge towards the state legal system over time.⁷⁴ In order to achieve this prediction they apply a ‘bargaining in the shadow of the law’ model to the phenomenon of legal pluralism. In their model, disputants can choose to either use an informal dispute resolution mechanism or the state courts. The disputants face both the threat and opportunity to appeal to formal courts if the other party, or they, are not satisfied with the informal outcome. However, only those with the highest outside options will choose to settle their disputes via the formal court process, as once an individual has appealed to the formal court he or she is excluded from the community and receives a level of welfare corresponding to his outside option thereafter. However, in order to maintain a sufficiently large population, the informal judge must trade off his preference for ‘traditional’ judgements with judgements that mimic the formal system and therefore reduce defections. Therefore, even though the formal courts may be resorted to rarely, their mere existence means that they have influence. Based on their assumptions, the model suggests that the informal customary law should converge to the formal law over time. However, their work does not explore the effect of the interaction of state and customary law on actual outcomes such as social ordering or crime.

At its most basic, an economic model of the law, which can be traced back to Jeremy Bentham, presumes that an individual will commit a crime if the expected pain is less than the expected benefit.⁷⁵ Under this most basic approach to law people are assumed to have no inherent ‘respect’ for the law, as it is considered ‘external’ to the individual. Robert Cooter summarises:

Economic models of the law typically accept the ‘bad man’ approach and add an element to it: rationality. A bad man who is rational decides whether or not to obey the law by calculating his own benefits and costs, including the risk of punishment. The rational bad man breaks the law whenever the gain to him exceeds the risk of punishment. Law and economics scholars typically make the rational bad man into the decision maker in their models.⁷⁶

While such an approach clearly has its limitations, it does seem particularly suited to the study of legal pluralism given that the transplanted state law is often seen as ‘external’ in a transplant country. It should also be noted that economic analysis recognises that many

⁷⁴ Gani Aldashev, Imane Chaara, Jean-Philippe Platteau, and Zaki Wahhaj. University of Namur (CRED) Working Paper: December 2007 Custom in the Shadow of the Formal Law: An Economic Analysis

⁷⁵ J. Bentham, *An Introduction to the Principles of Morals and Legislation*, 1789

⁷⁶ Robert Cooter, *Do Good Laws Make Good Citizens? An Economic Analysis of Internalised Norms*, *Virginian Law Review*, Vol. 86, November 2008, No.8, 1577-1601, p1591.

factors affect utility, including moral considerations, issues of conscience, psychological factors and social norms.

The work Titmuss, Frey and others that suggests that external intervention, usually by the state, in the form of monetary payments or punishments can have the effect of undermining and/or strengthening internal motivations for a range of activities depending on the circumstances.⁷⁷ Such work employs psychological explanations to suggest external interventions can affect internal motivation to do or not to do certain activities. That is, this work suggests external interventions can crowd-*in* or crowd-*out* internal motivation, or leave them unaffected. Their general argument is as follows; external intervention can be considered to raise the cost of undertaking certain activities the state wishes to discourage (or increasing the benefit of undertaking certain activities the state wishes to promote). This generally has the effect of raising (or lowering) the price of a certain activity. However, the intervention itself can affect internal motivation. Where the external intervention has no effect on internal motivation the states aim will be achieved, and a similar result occurs if the external intervention raises internal motivation, that is crowding-in. However, external intervention may lower internal motivation, as for example people may no longer value the intrinsic value of the act.. Where the external intervention lowers the internal motivation, the actual behavioural outcome will depend on what effect is stronger. That is, whether the external increase in marginal benefit outweighs the loss of internal motivation, or vice versa. Where the internal motivation falls more than the external inducement, crowding-out can occur. This literature for the most part focuses on issues of civic virtue, such as giving blood and paying taxes, however Akerlof and Dickens in the 1980s employed cognitive dissonance theory to imply that in criminal matters severe punishments may not reduce crime as it reduces self motivation to obey the law.⁷⁸

Internal motivations and psychological factors no doubt play a part in a person's decision to do or not do something. While drawing on the crowding of internal motivation literature the following model aims to provide some insight into how legal pluralism, specifically the interaction of state law with customary law, can alter the incentives (or disincentives) to commit a crime or not based on external factors, and internal motivations are taken as given.⁷⁹

The following model aims to provide a stylised explanation of how legal pluralism can change the incentive to commit a crime (or not) as opposed to if one legal order is operating in isolation. Of most interest is that the analysis shows how legal pluralism can lead to each

⁷⁷ See Titmuss, R. M. 1970, *The Gift Relationship*, Allen and Unwin, London. For a review of this literature see Bruno Frey and Reto Jegen, *Motivation Crowding Theory*, *Journal of Economic Surveys*, Vol 15, No.5 2001. 589-611

⁷⁸ Akerlof, George A & Dickens, William T, 1982. "The Economic Consequences of Cognitive Dissonance," *American Economic Review*, 72, 3 307-319.

⁷⁹ In part, this is done to reduce complexity. However to treat motivations as external may be more suitable to the analysis of legal pluralism, as some members of society may have internalised norms associated with adhering to customary law while others may internalise norms associated with adhering to the state law and may avoid the risk of 'double counting' motivations.

legal order undermining each other, which can lead to a paradoxical increase in the incentive to increase crime.⁸⁰

The Model

As stated above, at its most basic, the economic analysis of crime suggests that an individual will commit a crime if the expected gain to that individual exceeds the expected cost. That is, if:

$$g \geq p.S$$

where g represents the gains from committing the crime, p represents the probability of being punished and S represents the punishment.⁸¹

To begin with, the case of a traditional society in relation to a serious crime, such as robbery, is shown. The probability of being punished, p , is a function of both enforcement activity, denoted by e , and other factors such as technology, community networks, denoted by the vector X .

That is,

$$p(e, X)$$

where, $\partial p / \partial e > 0, \partial p / \partial X > 0$

It is assumed that increases in enforcement activity, e , increase the probability of being punished for a crime, as do increases in the vector X , such as increases in detection technology, stronger community networks, etc. The vector X also includes the methods used to control crime and legal principles adopted. In relation to customary law, it would therefore include the use of kinship and sliding scale justice; retribution and compensation; self help; the use of both group and strict liability; and the acceptance and use of the supernatural.

⁸⁰ It must be stressed that the explanation is stylised and does not include countless nuances associated with the practice and enforcement of both state and customary law.

⁸¹ In the literature, a density function, z , is often attached to g to acknowledge that gains from crimes differ amongst individuals within society. Adding a density function acknowledges that the gains from commit a crime differ among individuals, including internalised motivations. Such an addition also ensures that corner solutions are avoided, such as the whole population is expected to commit a crime or no-one is likely to commit a crime. Similarly a density function can be added to the punishment term, S , representing differing attitudes to punishment, including risk aversion. For a detailed discussion of the basic models see AM Polinsky, S Shavell, *The Theory of the Public Enforcement of the Law* Volume 1, 2007, Pages 403-454 in *Handbook of law and economics*, 2007, Elsevier. While such additions increase the realism of the model, they also increase the complexity. As these issues are not the focus of the analysis they are not included with little or no loss of its explanatory power. This is so, as the main focus of this analysis is on the interaction of the two legal orders, and in particular and to what extent they are substitutes or compliments and to what extent they produce externalities for one another in providing a disincentive for crime.

In deciding whether to commit a crime in a traditional society, a potential criminal weighs up the expected value of committing the crime versus not committing the crime. The expected value of not committing the crime is normalised to zero. The expected value of committing the crime is the sum of the two states, getting away with the crime and getting caught.

Getting caught: $p.R$

Getting away with the proceeds: $(1 - p)g$

Expected value of committing a crime: $p.R + (1 - p)g$

The individual will commit a crime when the expected value is equal to or greater than zero. In non-state society, it is assumed that the punishment, S , is in the form of retribution and equates to the negative of the gain, that is $R = -g$. Such punishment is often referred to as *payback* in Papua New Guinea and more generally as *lex talionis*, or an eye for an eye. Under customary law, payback provides a strong disincentive to not to commit a crime such as robbery. A potential robber knows that he faces the risk of retribution if he decides to commit a robbery. Retribution may take the form of a retaliatory robbery or violent attack or raid on the perpetrator. This assumption seems reasonable as it is common in customary law for retribution to be equivalent to the crime. Under such assumptions there will be no crime if $p > 0.5$. Therefore, if the community is able to ensure that the probability of being punished is greater than 0.5 customary law is able to control crime through the use of retribution.⁸²

Similarly, under state law jail terms can provide a disincentive against crime, in this example, robbery. Again, any potential robber has to weigh up the expected value of committing a crime versus not doing so where state law operates. The expected value of not committing a crime is again normalised to zero, and the expected value of committing a crime is the sum of the expected value of getting away with the crime, and getting caught and going to jail, denoted by J . The probability of getting caught, b , is a function of state law enforcement (policing) activity, e^s , and other technological factors, denoted by X^s . In relation to a society based on state law the vector X^s includes individual equality and responsibility, the use of police for enforcement, separation of criminal and civil matters (and requires intent and fault respectively), and the use of scientific method. That is:

$b(e^s, X^s)$

Again, the expected value of committing the crime is the sum of the two states, getting away with the crime and getting caught.

Getting caught: $b.J$

Getting away with the proceeds: $(1 - b)g$

⁸² Note, a more realistic assumption would be to assume that there is a distribution of gains but that the mean = -R. This would see a situation where there is some crime if $p > 0.5$, but it is managed.

Expected value of committing a crime: $b.J + (1 - b)g$

If we assume, for the time being, that the $J=R$, the equivalence of the technological factors denoted by the vectors X and X^s respectively and that the g is the same in both cases, we get an equivalent result as under customary law; there will be no crime if $p > 0.5$.

As illustrated above, both legal orders are able to provide an effective disincentive for crime. In the example used, the customary legal order uses retribution and the state legal order uses jail time in order to discourage criminal behaviour. As long as the probability of punishment is at a sufficient level, crime will be controlled as potential criminals are better off from avoiding criminal activity.

Under legal pluralism, a potential criminal faces a positive probability of being subject to and punished by both legal orders. This is so, as both legal orders have no, or limited, recognition of each other's jurisdiction. In such a case, where the superscript c represents customary law, a potential criminal faces the following expected value of committing a crime,:

$$p(e^c, X^c).R + b(e^s, X^s)J + (1 - p)(e^c, X^c)g + (1 - b)(e^s, X^s)g$$

That is, a potential criminal faces the prospect of being punished by both the customary legal order and the state legal order. On the face of it, this should see the expected value of committing a crime fall, and under a variety of circumstances this outcome will hold. However, it must be remembered that both legal orders are different: they have different punishments, that is R is unlikely to equate to J ; and production technologies for controlling crime are different, that is X^c is different from X^s . Furthermore, given the interaction of the two legal orders and that the two legal orders have different production technologies, there is a possibility that the effort levels of the two legal orders will be a function of each other. That is, the effort level generated by customary law is likely to be influenced by the state legal order, and vice versa.

It is unlikely that the punishments for certain crimes are likely to be equivalent under both legal orders. First, the type of punishment under customary law is often different to the state legal order. Customary law relies on retribution, compensation payments, shaming and expulsion for serious crimes, whereas the state legal order relies on imprisonment and fines. Furthermore, crimes under the two legal orders may differ in the level of gravity attached to them by the two legal orders. For instance in one legal order, a certain crime may be considered grave, while in the other, it may be considered a minor offence or even not an offence at all. Indeed, some crimes under one legal order may not be considered a crime in the other or even be considered a virtuous action under the other.

The two legal orders also have very different production technologies for controlling crime, for instance customary law used sliding scale justice that sees differing punishments for the same crime depending on social relations. This is in contrast to state law, that all other things equal, aims to punish individuals equally regardless of relationship to the victim. Customary law allows for group liability in many more instances than state law. Also, the distinction

between intentional harm and negligence is not an important factor in customary law, while it is in state law. Often the most important factor in customary law is that someone has been harmed regardless of intent or fault.

Given the different production technologies of the two legal orders, this is likely to have serious effects on enforcement activity of the two legal orders when they interact. This is especially so as customary law relies on self-help and the private enforcement of punishment through the use of payback and demands for compensation. Payback involving violence is considered a serious crime under state law as are private demands for compensation back by a threat of violence. Therefore, it is likely that customary enforcement activity will be negatively influenced by the level of state enforcement activity. This is so, as retribution and demands for compensation by private individuals are punished by the state, and will therefore less people willing to undertake customary law enforcement, as if they do; they face the risk of punishment such as lengthy jail terms. That is,

$$e^c(e^s)$$

where, $\partial e^c / \partial e^s < 0$

The degree of the negative relationship between customary law enforcement and state law enforcement will depend on the degree of distance between the two legal orders, denoted by d . Two legal regimes would be ‘perfectly distant’ if every virtuous action in one legal order was considered a violation in the other. Therefore the negative relationship between e^c and e^s is denoted by K and is a function of the level of distance, d , between the two legal orders. The term K is in effect a reaction function between customary and state law enforcement. The relationship is negative in that when state law enforcement increases customary law enforcement decreases, the effect of this negative relationship depends on the level of distance between the two legal orders. That is:

$$[e^c(e^s)] = K, \text{ where } K(d)$$

and, $\partial K / \partial d > 0$

Therefore, the greater the distance between the two legal orders, the greater the crowding out of customary law enforcement by state law enforcement. While many acts are considered wrongs under both legal orders, in the area of enforcement of customary law there is considerable distance between the two legal orders. While private enforcement of punishment is considered a virtuous duty of kin under customary law, it is considered a crime under state law. Therefore, we can expect state law enforcement to crowd out customary law enforcement. A decrease in enforcement effort therefore has the effect of reducing the probability of being punished under customary law, p . Therefore, p has a negative relationship with state law enforcement activity through its effect on reducing customary law enforcement activity. That is:

$$p(e^c(K(d)), X^c)$$

Where $\partial p / \partial e^c > 0, \partial p / \partial K < 0, \partial K / \partial d > 0, \partial p / \partial X^c > 0$

Therefore, the greater the level of state law enforcement activity, the lower the level of being punished under customary law due to a decrease in customary law enforcement activity. As state law enforcement activity approaches infinity, customary law enforcement activity approaches zero. If we assume production function for p is multiplicative then, as e^s approaches infinity, p approaches zero. That is, state law enforcement activity crowds out customary law activity, and its ability to punish criminal activity.

While state law enforcement has an effect on the customary law enforcement, customary law also has an effect on the ability of the state to enforce its laws, by effectively reducing its productivity where there is distance between the two legal orders. That is,

$$X^s(e^c)$$

where, $X^s / \partial e^c < 0$

As the level of distance rises, this negative effect on productivity, denoted by M , rises. That is

$$[X^s(e^c)] = M, \text{ where } M(d)$$

and, $\partial M / \partial d > 0$

The negative effect on state law productivity from customary law enforcement occurs in two main ways. First, the operation of customary enforcement means that for any given level of state activity, its resources are spread more thinly. This is so, as resources are now divided between investigating, punishing and deterring criminal activity *and* investigating, punishing and deterring customary law enforcement. The more distant, d , the two legal orders are and the more enforcement, the greater this effect. Second, the productivity of state law is reduced by customary duties that require individuals to help family and kin, or tribalism, and denoted by t , which is a subset of d . Customary duties often require agents of the state (such as police) to grant favours and give special treatment to their own clan/tribe. This can see a fall in the effectiveness of state law in determining criminal activity wrongdoers can call/rely on their own within the state to avoid detection or prosecution by the state. Therefore, the level of customary law enforcement, and the level of distance (including the extent of tribalism) sees a fall in state law productivity.

Therefore, while the probability of being detected and punished under state law is a function of state law enforcement activity and technology, it is also affected by customary law through an effective decrease in production technology. That is:

$$b(e^s, X^s((M(d)))$$

$\partial b / \partial e^s > 0, \partial b / \partial X^s > 0, \partial X^s / \partial M(d) < 0, \partial M / \partial d > 0$

By definition, legal pluralism occurs when two legal orders are operating in the same space. Therefore, while state law enforcement activity crowds out customary law enforcement, we assume that customary law enforcement activity is non-zero.

The potential criminal therefore faces the following expected value of committing a crime:

$$p(e^c(K(d)), X^c) + b(e^s, X^s((M(d))) + (1-p)(e^c(K(d)), X^c) + (1-b)(e^s, X^s((M(d))))$$

The above equation indicates that various outcomes relating to the expected value of committing a crime are possible where the two legal orders interact. In particular, where there is a low level of distance, d , and both p and b are non-zero, the interaction of the two legal orders will see a decrease in the expected value of committing a crime. That is, the interaction of the two legal orders will see an overall decrease in crime.

However, the expected value of committing a crime will be higher under legal pluralism than if either legal order is operating in isolation when the crowding out of customary law through enforcement activities by the state is greater than the increase in probability of detection and punishment by state law. That is, when an increase in state law enforcement e^s leads to a bigger fall in p than an increase in b . This can occur as increases state law enforcement crowds out customary law enforcement activity as defined by the term M without an equivalent increase in b . This is so, as the existence of the customary law can reduce the productivity of state law enforcement as defined by the term K . The driving factor affecting the relative magnitude of the functions M and K , is the distance between the two legal orders, d . That is even though b increases due to increased state law enforcement activity e^s , it is hampered by the negative productivity effects that result from the existence of customary law, while still crowding out customary law enforcement activity. Therefore, if there is sufficient distance between the two legal orders, an increase in state law enforcement can reduce the disincentive to commit a crime. Key factors identified in relation to d , are private law enforcement of customary law, or *self-help*, and the importance of kinship, or *tribalism*.

This model shows that under certain circumstances, the combination of the two legal orders can result in a decrease in the disincentive for committing crime. This result can occur, in they can each negatively affect the potency of each other in providing a deterrent against criminal activity.

Legal Pluralism in Papua New Guinea and its effects

Customary Law in Papua New Guinea

The following section aims to outline some of its key elements in Papua New Guinea and how it was able to co-ordinate behaviour among individuals and groups within society. The focus of the outline is in the area personal security (crime and dispute resolution).

Papua New Guinea is an extremely ethnically and culturally diverse country where each distinct social group in Papua New Guinea possesses its own particular enforceable rules and customary principles of justice. Therefore any generalisations can be contradicted by the

practice of one or more group. However, there are some common distinguishing features, some recurrent institutional similarities that is the focus of this section. Indeed, some would argue that there are strong ‘institutional similarities’ across most types of customary law in group based (or tribal societies) both across the world and in time⁸³.

The following description can be thought of as an *ideal type* of customary law and draws mainly on descriptions of customary law written mostly by anthropologists and indigenous Papua New Guineans at the time of independence in 1975 when ‘indigenous jurisprudence’ was advocated by many and led by the then charismatic Chair of the Law Reform Commission, Bernard Narokobi.⁸⁴ All of the key elements discussed below can still be found in Papua New Guinea, to differing degrees, and were also documented at the time of first European contact,⁸⁵

The most important element of customary law in Papua New Guinea is the importance of kinship and the group, or ‘tribe’.⁸⁶ To some, to talk of tribes and tribal in relation to customary law is considered politically incorrect. This is somewhat of a shame, as the importance of the group, kinship and social relations are *fundamental* to all aspects of customary law. Such a system has also been described as ‘sliding scale justice’⁸⁷ where the sliding scale depends on ‘social distance’. The rule of thumb is that social relations are more important than the actual crime or offence where close family and kin are treated leniently while members of other groups and strangers are treated harshly. The sliding scale of justice has the maintenance of social relations at its heart.

By definition, in stateless communities, such as pre-colonial Papua New Guinea, there were no governments or police to co-ordinate relations between individuals, including enforcing laws and correcting wrongdoing. Rather, this co-ordination role is typically disbursed throughout the community and individuals have certain rights and obligations within their group that maintain order and security and prevent wrong action⁸⁸. Therefore, an individual is obliged to protect the group and its property from outsiders, help fight or mete out

⁸³ For an analysis of ‘primitive law’ across space and time see Richard A. Posner, *The Economics of Justice*, 1983, Harvard University Press, Cambridge Massachusetts. Posner would argue that there are strong ‘institutional similarities’ across most types of tribal law both in space and time. Posner adopts a classic ‘evolutionist’ approach when considering tribal and modern state law.

⁸⁴ According to Weber’s definition, “an ideal type is formed by the one-sided *accentuation* of one or more points of view” according to which “*concrete individual* phenomena ... are arranged into a unified analytical construct” (*Gedankenbild*); in its purely fictional nature, it is a methodological “utopia [that] cannot be found empirically anywhere in reality” [Weber 1904/1949, 90]. Keenly aware of its fictional nature, the ideal type never seeks to claim its validity in terms of a reproduction of or a correspondence with social reality. Text from Stanford Encyclopedia of Philosophy, Max Webber, First published Fri Aug 24, 2007, <http://plato.stanford.edu/entries/weber/#IdeTyp>

⁸⁵ D. Weisbrot, *supra* no. 17 at 76.

⁸⁶ The dictionary definition of tribalism: ‘loyalty to one’s own particular tribe or social group’ Shorter Oxford English Dictionary Fifth Edition, Oxford University Press, 2002.

⁸⁷ Lawrence, p34

⁸⁸ Sinclair Dinnen, *Building Bridges: Law and Justice Reform in Papua New Guinea; State Society and Governance in Malenesia*, Discussion Paper 02/2, ANU Canberra, p3.

punishment when one of his group members is involved in a dispute, and live according to the group's standards.⁸⁹ Within the group the main methods to prevent wrong action are socialization, public opinion or criticism, the use of shame, and the rule of reciprocity.⁹⁰

When rights have been infringed or a dispute has arisen, it is up to that individual and his or her kin to take action. This generally involves a gathering of persons who have an interest - the kin of the two parties involved.⁹¹ The appropriate action to take depends primarily on the social range of the disputants, measured by closeness or distance from kinship or marital ties. The closer the relationship between the 'plaintiff' and 'defendant', the fewer the people will be involved, and the less severe the compensation demanded. Conversely, the greater the social range of a dispute, the more distant the relationship between the plaintiff and defendant, the more severe the compensation demanded or likelihood of retaliatory action.⁹²

In settling a dispute between people with close social ties, the aim is to often restore social order, or to patch up a relationship that has been broken or damaged. The other people likely to be interested in the dispute are the rest of the in-group who rely on both parties for survival. Therefore, the group has a strong incentive to ensure no irreparable harm is done to the disputants, as this would weaken their group against outsiders.⁹³ Self regulation is expected to control behaviour and prevent wrong action involving persons of the same in-group.⁹⁴ In these disputes retribution is mild or non-existent. Even on occasions involving homicide among close kin, disputes are settled by paying compensation rather than violent retribution.⁹⁵

Obligations to help others are also based on social proximity and distance. While there are strong obligations to help kin in times of need, there are none to help complete outsiders.⁹⁶ However, if one does not help kin when called upon, he or she can expect no help in return, and the individual could be forced from the group.⁹⁷

However, in interactions of people between different groups, self regulation is not expected to prevent wrong action. Where there is no morally binding relationship between the parties, as with strangers or members of rival groups, retribution or violent 'payback' is a much more likely action.⁹⁸ Such action sends a strong signal to outsiders that harm to the tribe and its members will not go unpunished.

⁸⁹ (Kepore 1975 p176).

⁹⁰ Lawrence 1969, p26

⁹¹ Lawrence: 1969, p24

⁹² Lawrence 1969, pp32-33.

⁹³ Kepore: 1975, p177

⁹⁴ Lawrence 1969, pp32-33.

⁹⁵ Lawrence 1969, pp32-33.

⁹⁶ Lawrence 1969, p29

⁹⁷ Many of the plantation workers in PNG are made up of those who have been shunned by their community. Lawrence P27

⁹⁸ Dinnen, 2002

Often questions of whether damage to a person was caused intentionally or by a negligent act and, if so, how much negligence was involved, make little difference in customary law.⁹⁹ Liability is far more akin to strict liability rather than one based on a negligence standard or criminal intent. The importance of social relations plays a large role too. As noted earlier, even for the most serious wrongs, penalties for close kin are often very light, whereas penalties for outsiders are harsh. Customary law also often sees collective responsibility. In the case of an outsider who is blamed for an offence, the question of which *individual* is at fault may not of great relevance, and his or her kinsman may be held liable and be considered fair game for retribution¹⁰⁰.

Reciprocity also plays an important role, albeit moderated by social distance. First, when considering compensation claims or retaliation for those where there is considerable social distance, the most likely action is one of equivalence. For example, if a domestic animal were to be killed, this may result in a retaliatory killing; or in the case of homicide, retaliation could involve a retaliatory homicide.¹⁰¹ However, again kinship ties and social distance play an important role. For example, where there are social relations, an assembly can be established and a demand for compensation can be made, rather than retaliation and in the case of close kin, compensation demanded might be minor even in the case of a serious grievance. Therefore, reciprocity also plays an important role in relation to the dealing out of punishment, where the kin of the aggrieved are required to help mete out punishment. Similarly, the kin of the perpetrator may be liable for retaliatory punishment and/or compensation claims.

Another important aspect of customary law in Papua New Guinea is the belief (or the acceptance) of the supernatural in everyday life. The use of sorcery is acknowledged as a powerful force and is considered to be the source of death or misfortune. Where homicide is considered to be caused by witchcraft, retaliation can include a payback killing.¹⁰² Alternative forms of punishment include demands for compensation or counter-sorcery.¹⁰³

Richard Posner, and more recently Parisi and Dari-Mattiacci, have attempted to provide a rationale for the main principles of customary law similar to those described above, for instance, the different treatment for insiders and outsiders, and the use of group and strict liability. While their analysis at times is both crude and simplistic, it does provide insight into how customary law can be effective in regulating crime and controlling behaviour. They suggest that given the high information costs and low levels of technology, tribal institutions were generally 'economically efficient'.¹⁰⁴ For example, as close kin rely on each another for

⁹⁹ Kepore: 1975, p177

¹⁰⁰ Lawrence, pP30-33

¹⁰¹ Lawrence 1969, p31

¹⁰² Lawrence1969 , p31

¹⁰³ Lawrence1969 , p31

¹⁰⁴ Richard A. Posner, *The Economic Theory of Primitive Law*, in *The Economics of Justice*, 1983, Harvard University Press, Cambridge Massachusetts. [Parisi F.](#), [Dari-Mattiacci G.](#) *The rise and fall of*

survival and protection, the probability that one would deliberately kill another is expected to be very low compared to strangers. Also, even where a serious dispute has arisen, given the high population density, it is unlikely that an individual would deliberately carry out an offence against close kin as the probability of prevention, apprehension, and detection would be extremely high. Therefore, kin are generally presumed to act in a benign manner toward each other so retribution is generally avoided and compensation is light, as the need for deterrent through punishment is much less compared to that of strangers.

Group responsibility in exercising justice (i.e. kin organising meetings, demanding compensation and carrying out retribution) and liability (where kin or other tribe members are liable for compensation or retribution) also seems efficient by way of the incentive structure it generates for the individual. The group, and the individuals within it, need to provide a credible threat against attack from outsiders. Therefore, if they die or become incapacitated their kin are needed to avenge their death or injury in order to maintain a strong disincentive. Also, the likelihood of reprisal is much higher if a number of people are involved. Collective responsibility also serves the purpose of providing a strong incentive for kin to monitor and regulate the actions of each other, and to search for and weed out anti-social members. Customary law of the type described above also seems to be able to generate reasonably high levels of personal security. While there are no data for Papua New Guinea, Richard Posner cites data for tribal communities in Africa that suggests customary law generates comparable homicide rates comparable to that of the United States.¹⁰⁵

The interaction of customary law and the transplanted law

While it can be argued that the job of both customary law and the transplanted state law is to co-ordinate behaviour, what actions are rewarded and what are punished can differ greatly between the two systems. This is problematic for an individual who faces the prospect of having both sets of rules enforced, as he or she will face mixed signals of what behaviour is rewarded and punished.

Perhaps cause of greatest distance between the two legal orders is the importance of social relations and the concept of kinship and social distance in customary law and the lack of it in state law. As stated earlier, whether compensation is demanded or revenge taken, and with what speed and magnitude, depends on the social distance between the victim and the perpetrator under customary law.¹⁰⁶ ‘Sliding scale justice’ based on kinship and social distance sees those with close ties pay relatively lightly, while those with distant or no ties pay heavily. For example, a homicide by close kinsman may result in relatively light

communal liability in ancient law (2004) *International Review of Law and Economics*, 24 (4), pp. 489-505.

¹⁰⁵ African Homicide and Suicide 237, 256 (Paul Bohannon ed. 1960) from Posner. Whether one can be delivered at lower cost than another is another matter. For reasons that will be discussed in more detail later (such as economies of scale, the inefficiency of group liability, the use of costly information gathering mechanisms), it is likely that state justice systems are considerably cheaper to deliver than tribal ones for a large group of people.

¹⁰⁶ Strathern 1975, p187

compensation demanded, whereas homicide by a stranger would likely call for a payback homicide of someone in the stranger's tribe. Clearly, the exercise of 'sliding scale justice' is in direct contrast to the transplanted criminal law of Papua New Guinea. As noted by Lawrence, the state law comes from '...a society in which the individual has become the indistinguishable, transposable citizen-isolate and which stresses judicial authority at the expense of all other factors as the governing factor in litigation.'¹⁰⁷ For the transplanted law, equality is held up as one of the highest of all ideals. To highlight this difference, Lawrence points to the establishment of tribal courts in the early days of the colony where the village headman sat in judgement. The state officials found the headman exerted authority in a way that the state regarded as corrupt by slanting decisions in favour of close relatives. However, this is what is expected under customary law. Lawrence concludes that:

[I]t was impossible for them, as kinsmen, to operate as impartial officials in a society with a kinship based structure and morality. They could not be expected, in the name of abstract authority, to sacrifice the interests of individuals on whose daily co-operation they depended for survival in society.'¹⁰⁸

In addition to sliding scale justice, the customary concept of *self help*, the widespread use of strict and group liability, and the fact that some actions considered crimes under the transplanted state law are not crimes under customary law, and vice versa, can lead to a mixed incentive structure for an individual facing the possibility of having both the customary and state legal system enforced in relation to their actions. Indeed, some actions considered crimes under state law are often obligations or considered virtuous under customary law. Furthermore, the combination of different customary principles can exacerbate the problem, for instance the combination of sliding scale justice with self help.

The concept of self help, where an aggrieved individual initiates and carries out retribution with his or her kin is contrary to the transplanted state law. Such actions in the origin country are treated harshly and vengeance outside the state legal regime is punished severely. However, retribution against a perpetrator, or his group, is often considered necessary under customary law.¹⁰⁹ However, as explained earlier, kin are required to help the aggrieved in meting out retaliatory punishment if they wish to have the same protection afforded to them.

Issues of criminal intent or standards of care are given little attention in customary law, whereas under the transplanted state law requires *mens rea* in criminal matters and negligence in civil matters. Similarly, the use of group liability, where kin and tribe members are subject to claims for compensation or violent retribution, is also in direct contrast to the principles of criminal law¹¹⁰. The combination of strict liability and group liability in customary law can see many situations where it clashes with the transplanted state law would produce vastly

¹⁰⁷ Lawrence 1969, pP34

¹⁰⁸ Lawrence 1969, pP35

¹⁰⁹ Pitts 2001, p132

¹¹⁰ The state does recognise group liability in relation to some matters under the jurisdiction of the Village Courts, matters of compensation, and tribal fighting, see preceding chapter.

different outcomes. For example, if car driver hit a pedestrian on a dark road while travelling within the speed limit, and taking all other ‘reasonable’ precautions, would not be found liable for the death under the state law. However, under customary law, the driver or his or her kin or group would be subject to compensation demands or retributive violence. Another example is the case of a workplace accident that results in death. Under customary law there is no distinction between this type of death and the situation where a man has been killed by an assault or similar incident.¹¹¹ The immediate reaction is that compensation must be forthcoming or payback will follow. The recognition of collective responsibility in the case of an outsider can see the kin (or perceived kin) held liable and/or be considered fair game for retribution. When the state is considered the perpetrator, the victim’s kin may look for opportunities for revenge by attacking government vehicles, attacking police or attempting to steal government property.¹¹²

Another key difference between the transplanted state law and customary law is that some acts are not considered crimes under one law, but are under another, and vice versa. Similarly, other crimes differ in gravity under the different legal regimes. For example, under state law sorcery is considered a minor offence, whereas under customary law, it is considered a serious offence and can be punished with death.¹¹³ There remains a widespread and deeply-held belief in sorcery in Papua New Guinea. Many cases arise where ‘unexplained’ deaths are attributed to sorcery, resulting in the killing of the accused sorcerer. While the person committing the homicide often acts with the approval of his society, or even upon its bidding, the courts have often taken a relatively inflexible stance on this issue.¹¹⁴ However, ‘self help’ and informal executions of sorcerers continue across Papua New Guinea both in rural areas and its cities and towns. One recent estimate put the number of killings at more than 20 per month in one province in Papua New Guinea alone.¹¹⁵

Other serious crimes under customary law include adultery, which is punishable by death. A Law Reform Commission survey at the time of independence found that many people ranked adultery third in terms of seriousness, behind only wilful murder and conversion of real property rights.¹¹⁶ Conversely, many serious crimes under modern state law, such as domestic violence, are not considered offences, but sometimes maybe even an enforcement mechanism of customary law.

¹¹¹ Campbell 1975, p193

¹¹² Campbell 1975, p193

¹¹³ Lawrence, 1969, p29

¹¹⁴ Wiesbrot 1982 P79

¹¹⁵ See F. Zokka and J. Urame (eds), *Sorcery, Witchcraft and Christianity in Melanesia*, 2008, the Melanesian Institute, Goroka. For a recent, albeit, sensational account of sorcery in Papua New Guinea see *Witch hunts, murder and evil in Papua New Guinea*, <http://www.independent.co.uk/news/world/australasia/witch-hunts-murder-and-evil-in-papua-new-guinea-1681072.html> or *Bush Knives and Black Magic*, <http://www.channel4.com/programmes/unreported-world/video/series-2009/episode-9>

¹¹⁶ Weisbrot, 1982, p64

In summary, customary law is fundamentally different to state criminal law in Papua New Guinea. Perhaps the most important are the concepts of a 'sliding scale of justice' and 'self help' which both allow, and at times require, retributive violence¹¹⁷ while at other times demand light, or no, punishment for what the state considers to be serious crimes. The differences between the two systems can see the same action by the same person be an act of civic virtue, or act of law enforcement, in one system, while being illegal, with significant penalties, in the other.

A co-ordination game of legal pluralism

Applying the tools of game theory to the phenomenon of legal pluralism brought about by a distant legal transplant can help us better understand the essence of the co-ordination problem it can generate. In doing so, one needs to model the interaction of the decision makers concerned, with the hope of gaining non-trivial insights.

Prior to colonisation, or when a community is free from state law interference, perhaps due to remoteness, customary law rewarded and penalised certain behaviour. Benefits for adhering to customary law include the personal security and protection from the tribe, the sharing of produce and other communal goods and general acceptance from doing one's duty. If one adheres to the custom particularly well, for example by an eagerness to protect the tribe from outsiders and undertake reprisal attacks, they may receive additional benefits and elevation of status. Sanctions included the loss of reputation, ridicule, the demand for compensation payments and being shunned. More serious or continued violations may include violence or expulsion from the group. The likelihood of being rewarded or punished for certain behaviour provided a strong incentive for individuals to act in a consistent manner in adhering to customary law. Conversely, where the state is clearly dominant it generally pays the population to adhere to its law, for example in the export nations, such as England and France. While there might be instances for opportunistic behaviour at the margin where either the customary law or state law reigns uncontested, for the vast portion of the population it pays to adhere to the dominant legal order. That is, there is clear strategy for the individual depending on two stylised states of the world; one being a pre-colonial state, and the other being a strong (Hobbesian) state. In the pre-colonial state it would be in the individual's interest to abide by the tribal law, while in the strong state it would be in the interest to abide by the state law. Therefore, law is able to fulfil its co-ordination function and people generally behave in a consistent and predictable manner.

However, legal pluralism brought about by a distant legal transplant and a weak post-colonial state complicates matters. To gain insight into this social fact we set it up as a strategic co-ordination game between two interacting decision makers, who are labelled as Player 1 and Player 2. For the purposes of this analysis, Player 1 can be considered a person within the

¹¹⁷ In some jurisdictions, reference to tribal customary law can be used as a mitigating factor in sentencing decisions (e.g. Australia). In other jurisdictions, the acceptance of customary law is given legal backing, but not in practice (e.g. PNG). The reason why custom is not given much weight in

community randomly matched with another person in the community. Alternatively, Player 1 can be considered the State, and Player 2 could be members of a tribe.

Where a distant legal transplant is present, both Player 1 and Player 2 have a choice, to either follow the set of rules that belong to customary law (*TRIBE*) or to follow the set of rules that belong to the transplanted state law (*STATE*), and in doing so receive a pay-off. The pay-off received is affected not only by his or her actions but also by the actions of the other player, and thus captures an element of interaction between the two players. As can be seen in the matrix below, the pay-offs are labelled ‘co-ordination’ and ‘conflict’.

Figure 1: A co-ordination game in legal pluralism

		Player 2	
		<i>TRIBAL</i>	<i>STATE</i>
Player 1	<i>TRIBE</i>	Co-ordination	Conflict
	<i>STATE</i>	Conflict	Co-ordination

As the above matrix shows, there are four possible outcomes. Two outcomes result in co-operation, that is when both Player 1 and Player 2 choose *TRIBE* or when they both choose *STATE*. Two outcomes result in conflict, when Player 1 chooses *TRIBE*, and Player 2 chooses *STATE* and when Player 1 chooses *STATE* and Player 2 chooses *TRIBE*. In the above

example, the *actual* rule chosen (STATE or TRIBE) for co-ordinating behaviour does not matter; rather what matters is that those who interact follow the same rule.

The benefits of co-ordination (or the costs of legal pluralism) will depend on the distance between the two legal orders. Two legal regimes would be ‘perfectly distant’ if every virtuous action in one legal order was considered a violation in the other. An example of a situation where two *rules* are perfectly different is choosing which side of the road to drive a car. In this case, we can assume that one legal order enforces the left side and the other the right side.

Figure 2 below depicts a scenario where the two players share a common road and each has to decide whether to keep to the left or right. In this matrix numerical pay-off is attached to each strategy. In this case, the adverse effects from conflict are normalised to zero, and the benefits from co-ordination represented as 1. Attaching numerical values to the outcomes enables a richer analysis. As can be seen from the matrix below, the pay-offs for each player depend on the strategy taken by the other. For example, if Player 1 chooses to keep to the *LEFT* they gain a positive pay-off of 1 if Player 2 also chooses keep to the *LEFT*, as the chance of a head on collision is eliminated. However, if Player 1 chooses to keep to the *LEFT*, but Player 2 chooses to keep to the *RIGHT*, both parties suffer, as the parties are likely to have a collision. In the matrix below this adverse consequence is normalised to zero. Similarly, if Player 2 chooses to keep to the *LEFT*, but the Player 1 *RIGHT*, both parties face an adverse pay-off of zero. Finally, if the Player 1 chooses to keep to the *RIGHT*, as does Player 2 both parties face a positive pay-off of 1. In this example, both individuals benefit from co-ordinating their choice, and so does society, which can be measured by the sum of the two players pay-offs.

Figure 2: A co-ordination game in legal pluralism

		Player 2	
		<i>LEFT</i>	<i>RIGHT</i>
Player 1	<i>LEFT</i>	1,1	0,0
	<i>RIGHT</i>	0,0	1,1

The concept of a Nash equilibrium is based on the idea that each player chooses the best available action, but that this best action depends on the action of the other players, who are also assumed to choose their best available action. Therefore, as Nash equilibrium is an action profile with the property that no player can do better by choosing a different actions, given that every other player also adheres to their best action profile.¹¹⁸ At a Nash equilibrium, no player has an incentive to choose a different action. In the above game, there are three Nash equilibria. Two are pure strategy equilibria and one is a mixed strategy equilibrium.

As can be seen (*LEFT*, *RIGHT*) does not satisfy the criteria for a Nash equilibrium, as when Player 2 chooses *RIGHT*, Player 1 would receive a higher pay-off in choosing *RIGHT* too. Similarly, if Player 1 chooses *LEFT*, Player 2 would receive a higher pay-off from choosing *LEFT* too. Using the same logic it can be shown that (*RIGHT*, *LEFT*) is also not a Nash equilibrium. However, (*LEFT*, *LEFT*) and (*RIGHT*, *RIGHT*) are both Nash Equilibria. When Player 1 chooses *LEFT* and so does Player 2, neither player can do better by switching. Similarly, when both players choose *RIGHT* there is no incentive for either to deviate. Therefore, under the co-ordination game the parties should settle on both keeping to the same side of the road, which is in interest of each player and society as whole.

In the case of a pure strategy as above, every player's behaviour is assumed to be the same, that is drawn from a homogenous pool, and is assumed to choose the same action whenever he or she plays the game. These are quite restrictive assumptions, as it does not allow for two particularly relevant possibilities. The first is that players may mix their behaviour, that is, sometimes choosing *LEFT* and sometimes choosing *RIGHT*, or believe that the other players (correctly or incorrectly) will mix their behaviour. The second is that the population might be mixed where some types choose *LEFT* and others choose *RIGHT*. These two situations can both be represented by p which can represent either the fraction of the population who choose *LEFT*, or the probability that a representative individual chooses *LEFT*. Where this more realistic assumption is allowed, we find that there is a third Nash equilibrium where p for both parties equates to 0.5. That is, each player assigns a probability of $\frac{1}{2}$ to *LEFT* and a probability of $\frac{1}{2}$ to *RIGHT*.¹¹⁹ This equilibrium sees half of all encounters resulting in a collision. The intuition behind such a result is that given that each player knows the other is

¹¹⁸ Definition taken from Martin Osborne, *An Introduction to Game Theory*, 2004, OUP, New York.

¹¹⁹ Solving for a mixed strategy equilibrium is as follows. In order to find p (the probability of choosing left for Player 1, we used Player 2's pay-off. If player 2 chooses *LEFT* its expected pay-off is $1p + 0(1-p)$. If player 2 chooses *RIGHT* its expected pay-off is $0p + 1(1-p)$. As player 2 is mixing to optimise its pay-off, the pay-offs from choosing *LEFT* and *RIGHT* must be equal. Therefore, $1p + 0(1-p) = 0p + 1(1-p)$; which solves to $p = \frac{1}{2}$. Knowing that $p = \frac{1}{2}$, player 2 can also do no better than by also choosing to mix randomly of $\frac{1}{2}$ between *LEFT* and *RIGHT*. It should be also noted that the pure strategies (i.e. $p = 1$ and $p = 0$) are also still Nash Equilibria as the expected pay-off is $\frac{1}{2}$.

mixing, they can do no better by mixing randomly themselves to $\frac{1}{2}$, given that the other player knows this, the best they can do is to randomly mix to $\frac{1}{2}$ themselves.

In the context of this work it is perhaps the most helpful to interpret mixed strategies as the case where some individuals adhere to one set of rules, say those who follow customary law and stick to the *LEFT*, and those who always follow state law and stick to the *RIGHT*. The following analysis shows that even when there are gains from co-operation, conflict can still result when there is uncertainty over which set of rules the other will follow. It should be noted that this mixed strategy Nash equilibrium that results in conflict half of the time occurs when it is in the interest for both parties to choose one strategy, whether it be *LEFT* or *RIGHT* and stick to it. That is, when there is uncertainty over which rule that will be applied to a given circumstance (ie legal pluralism), law loses its co-ordination (or ordering) function with a loss to both players and society (the sum of the two player's pay-offs: 1 rather than a possible 2 under full co-ordination).

If we are to make the jump from the *LEFT* to *RIGHT* analogy to customary law and state law, the pay-offs in the above matrix suggests that the two legal orders are perfectly distant. That is, what is virtuous under one regime is punished by the other, and vice versa. While such an assumption is an oversimplification, many examples cited above where a virtue under tribal law is punished under the transplanted law, and vice versa. Furthermore, this is particularly so in the area of criminal law.

Legal pluralism can be represented by the above matrix where both sets of rules might be chosen by the state (Player 1) and the individual (Player 2). Under such circumstances there is no clear strategy for the individual to choose to achieve co-ordination. When contemplating an action, the individual needs to consider the relative pay-offs as well as the probability of the state or the tribe enforcing their rules upon them. In the situation where both the state law and tribal law are partially enforced, a similar situation will result. For example, if the probability of the state law being enforced is 0.5 the individual's optimal strategy is to also pursue each strategy with the likelihood of 0.5. Given these mixed strategies it could be expected that co-ordination would occur half the time.

Therefore, the existence of legal pluralism can blur or even nullify the incentive structure that people face that sees both legal orders lose one of their key functions, co-ordinating behaviour. That is, neither legal order is able to promote predictability of behaviour for the people subject to it. The incentive structure is less blurred the lower the level of legal pluralism. For instance, if there is only a small probability of state law being enforced while there is a high probability tribal law being enforced, the incentive structure will point toward adhering to tribal law, and vice versa. Similarly, the incentive structure will be less blurred the closer the two legal regimes are to each other.

The above analysis provides two important propositions. The first is that all other things being equal the greater the distance between legal orders, the greater the cost of legal pluralism, or put another way, the greater the potential benefits from legal co-ordination. Distance, measured by the probability and magnitude that the same act is punished by one

legal system, but rewarded by the other, has a direct affect on the cost of legal pluralism. If the distance between the two legal orders is slight, such Europeans being subject to other European legal transplants, the disorder brought about by legal pluralism is minimal, whereas if the ‘distance’ is great such as a tribal society being subject to European legal transplants the disorder of incentives is significant. The intensity of customary duties can further increase the costs of legal pluralism, by reducing the effectiveness of the state legal order to operate effectively. The greater the customary obligations, the more likely that agents of the state are compromised and face a dilemma of providing preferential treatment to members of their group, or adhering to the state law.

The second proposition is that the higher levels of legal pluralism, the higher the costs to society. The most costly form of legal pluralism occurs where people within a society consistently abide by two perfectly distant legal orders and the co-ordination function of law is non-existent. That is, one person consistently keeps to the left and the other to the right. However, the above analysis suggests such a result will not be an equilibrium state. Another costly form of legal pluralism, that can be an equilibrium state, occurs when a person is unsure what legal order others will follow. Where an individual faces this uncertainty, he or she can do no better than to alternate between the legal orders as well. This is so, as if a person considers that those who they interact with (be it the state or other individuals) are likely to mix their strategies, then so are they. In such a case, a situation can develop where everyone will alternate between abiding by the two legal orders, and half of all interactions result in conflict. In such a case, the co-ordination role of law greatly diminished. Such a finding also suggests that efforts to simultaneously bolster two legal orders will lead to no increase in co-ordination. This is clearly an issue for a weak post-colonial state such as Papua New Guinea.

This section above demonstrates how legal pluralism can lead to adverse consequences for society where there is considerable distance between the two legal orders. The example used was where one legal order enforces the left side and the other the right side when driving a car. If the legal orders were of equal strength, a situation can develop where half the citizens would keep to the left, and the others would keep to the right. Such a circumstance would result in a loss of the co-ordination function of law, and half of all car trips would likely to result in an accident. There would be fewer accidents if everyone keeps to the left, *or* right when driving.

Conclusion

This paper, after reviewing the literature, has aimed to develop a basic economic model for legal pluralism and to apply game theory techniques to the phenomenon. In relation to the level of crime, the economic model suggests that various outcomes in relation to crime are possible where traditional knowledge, in the form of customary law, interacts with the state legal order. In particular, where there is a low level of distance, d , and there is a positive probability of being punished by both customary law and state law, the interaction of the two legal orders will see a decrease in the expected value of committing a crime, and a consequent fall in the level of crime.

However, the expected value of committing a crime will be higher under legal pluralism than if either legal order is operating by itself when the crowding out of customary law through enforcement activities by the state is greater than the increase in probability of detection and punishment by state law. This can occur if state law enforcement activity crowds out customary law enforcement, but is unable to replace its effectiveness of controlling crime as it is hampered by negative productivity effects that result from the existence of customary law.

This work develops two propositions. The first is that all other things being equal the greater the *distance* between legal orders, the greater the potential disorder legal pluralism may generate leading to higher levels of crime. Legal distance is measured by the probability that the same act is punished by one legal order, but is rewarded by the other. If the distance between the two legal orders is slight, the disorder brought about by legal pluralism is likely to be minimal. Whereas, if the distance is great, such as overlaying a Western legal order on a previously stateless society, the disorder generated by legal pluralism is likely to be significant. When thinking of the concept of legal distance, it may be useful to separate two elements of distance. The first is distance caused by differing rules particularly in relation to enforcement activities associated with customary law, self help; and the second is the intensity of kinship obligations, tribalism. The second proposition is that the higher the intensity of legal pluralism, the higher the costs to society. The most disordered form of legal pluralism occurs where both distant legal orders are equally potent. That is, where an individual faces an equal likelihood of being subject to either differing legal orders. In relation to criminal matters, this can see a failure of sufficient disincentives to commit crime, and a consequent increase in criminal activity.