

Evidence-based policy making in the tropics: are developing countries different?

Stephen Howes, Ashlee Betteridge,
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Abstract

Evidence-based policy making has been advocated as much, if not more, for developing as developed countries. However, very little attention has been given to the conditions or prerequisites for evidence-based policy making, and whether these are in general more or less likely to hold in developing countries. We argue that an environment conducive to evidence-based policy making is one in which there are strong incentives for good policies to be adopted, capable institutions to implement them, a wide range of domains within which good policy can be adopted, and a ready supply of well-developed policy proposals. Based on the development literature, our own experience, and the comparison of two countries, Australia and Papua New Guinea, we conclude that these conditions are all more likely to exist in developed than developing countries. Developing countries on the other hand have the advantage of foreign aid. Much foreign aid is dedicated to the purpose of facilitating evidence-based policy making. But we argue that at best this is a partial compensation for the other problems faced by developing countries in striving to base their policies more firmly on sound evidence. While this paper is not a counsel for despair, it is a call for realism. Strengthening institutions or the structure of the economy are long-term endeavours. But the dearth of funding for research and teaching is a constraint that can more readily be lifted, especially with support from donors.

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Introduction

Evidence-based policy making, which this volume seeks to promote, is as important for poor countries as for rich ones, perhaps even more so. But can evidence-based policy making be made to work in poor countries? What special challenges do such countries face in formulating and implementing evidence-based policy?

Australia's Productivity Commission defines evidence-based policymaking as 'a process that transparently uses rigorous and tested evidence in the design, implementation and refinement of policy to meet designated policy objectives' (Productivity Commission, 2009). The "theory of change" behind evidence-based policy runs something like as follows: policy making suffers from a lack of good, substantiated proposals; therefore, if we can improve the quantity and quality of policy proposals we will improve the quality of policies.

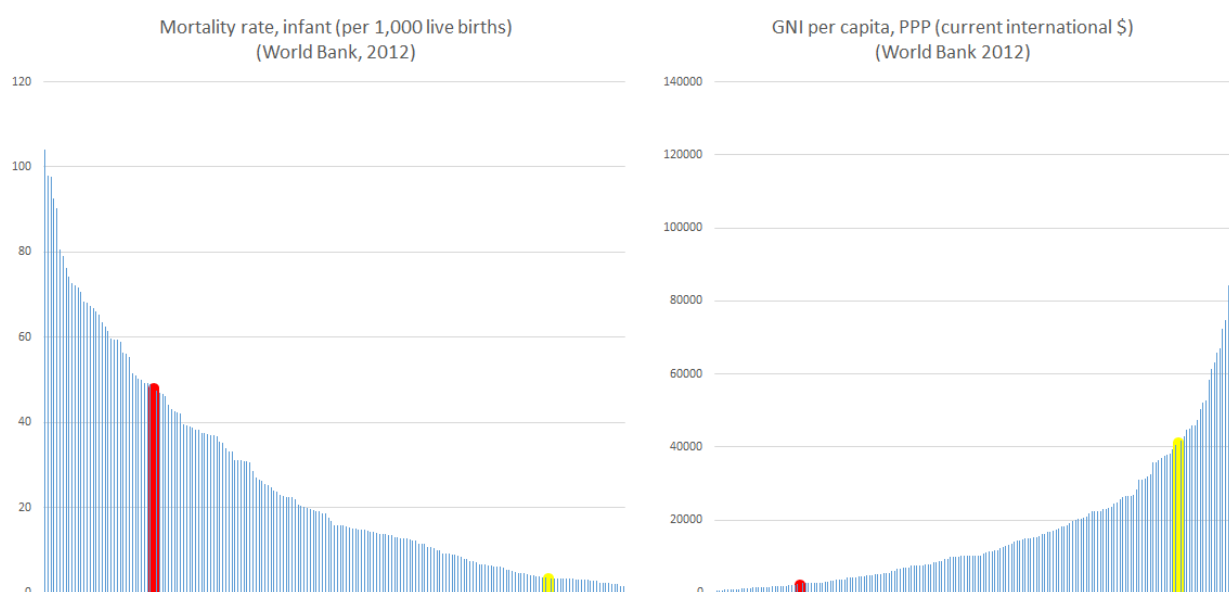
This argument seems reasonable, but incomplete. One can think of numerous constraints on the adoption of good policies, of which a scarcity of good proposals is only one. Those in a position to make good policy may lack the incentive to do so. And even if the supply of proposals is the binding constraint, relaxing that constraint might be difficult. These are the issues we explore in this paper.

In the literature, evidence-based policy making has been advocated as much, if not more, for developing as developed countries. Among its champions have been multilateral institutions such as the World Bank, which are active in developing countries. A special area of focus has been policy evaluation, with the promotion of randomized control trials as a tool that could be transformational for development policy (Duflo and Kremer, 2008).

However, very little attention has been given to the conditions or prerequisites for evidence-based policy making, and whether these are in general more or less likely to hold in developing countries. Our attempt to examine the challenges facing evidence-based policy making in developing countries draws on the development literature, on our own experience, and, in particular and for concreteness, on comparisons between Australia and Papua New Guinea (PNG), two countries the authors collectively know

well. These two neighbours make for useful comparisons as they are, despite their geographical proximity, very different. If we rank all countries of the world for which data is available, we can see that Australia is a country in which the mortality rate is very low and income per capita very high. In PNG this situation is reversed (Figure 1). Put simply but accurately, Australia is a developed or rich country and PNG is a developing or poor country.

Figure 1: Infant mortality rate and GNI per capita, Australia and PNG compared with other nations of the world

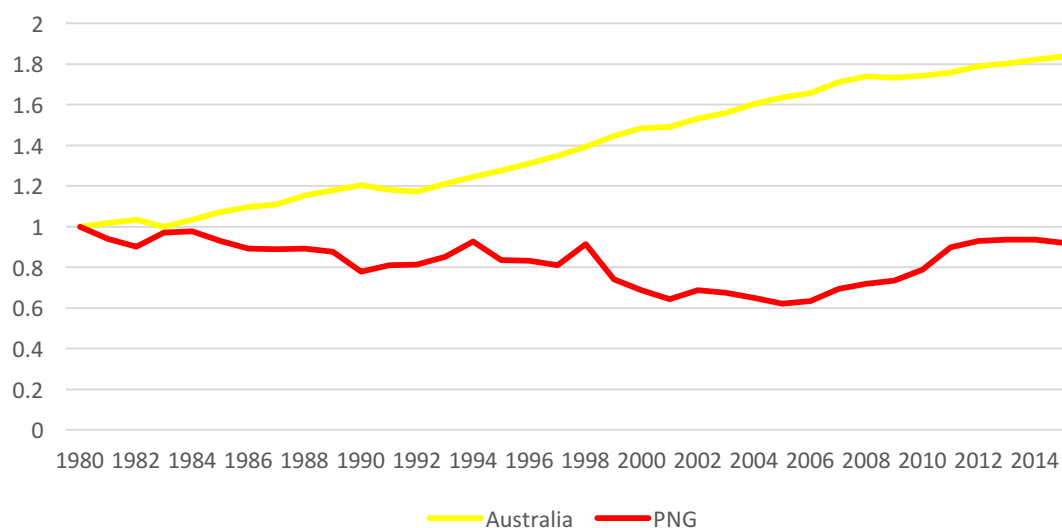


Sources and notes: World Development Indicators. In this and subsequent graphs, PNG is represented by the red line; Australia by the yellow one.

The two countries are also on different growth trajectories. Papua New Guinea is a resource dependent economy, and, for such economies, GDP can be a particularly misleading indicator of economic welfare. A better indicator is non-resource GDP, that is, the domestic output of the non-mining and non-petroleum sectors. (The argument is that whatever benefits of mining and petroleum projects are captured by PNG are reflected in the non-resource sector through spillover effects, in particular construction and government revenue.) Non-resource GDP per capita is about the same today in PNG

as it was shortly after independence, in 1980. By contrast, Australia's GDP per capita is almost twice as high now as it was then.

Figure 2: Income per capita in Australia and PNG



Source and notes: Australian data from World Development Indicators; PNG data compiled by Paul Flanagan from various sources. Data in constant, local currency prices. Australian data is GDP per capita and PNG data is non-resource GDP per capita (which is appropriate given the large share of the resources sector in the PNG economy).

Of course, one should be wary of generalizations based on comparisons between two countries or even two categories of countries. Developing countries differ from each other, and in many cases it is better to think of countries as facing various degrees of challenge, rather than either facing a challenge or not. Nevertheless, we do think developing countries are different, and that careful scrutiny of the challenges they face when it comes to evidence-based policy making will pay dividends.

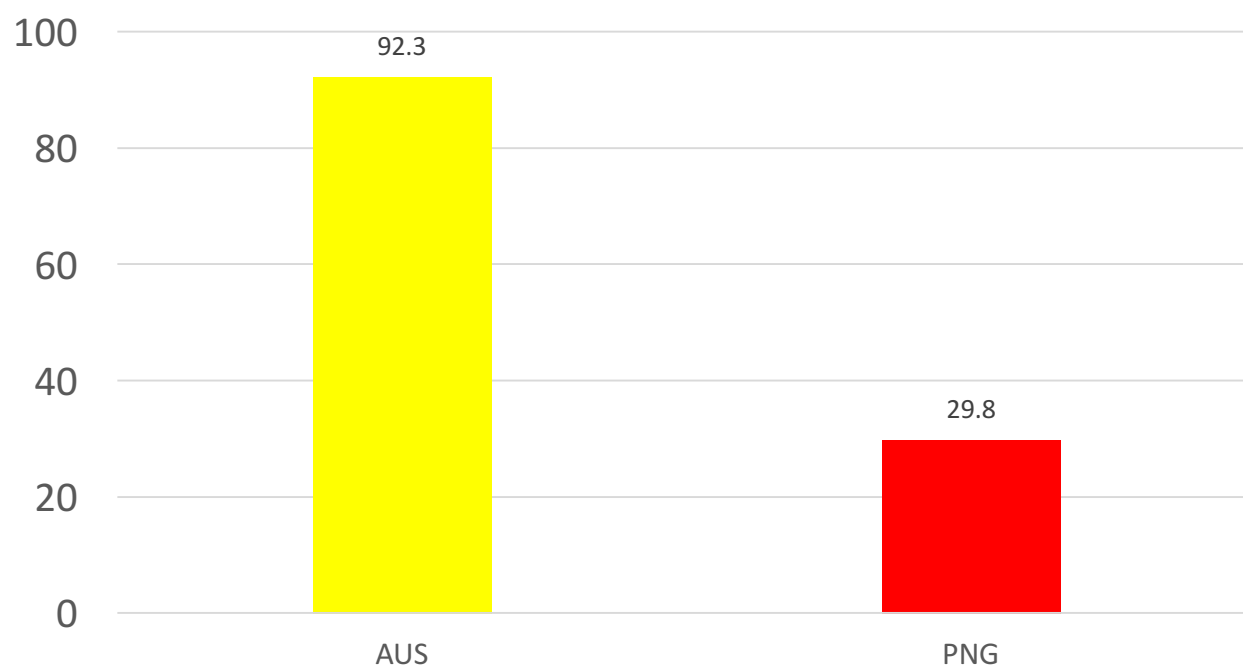
Our discussion and the structure of our paper are based around four differences relating to institutions, policy options, research capacity and foreign aid.

Institutions

As defined by Douglas North, institutions are ‘the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction’ (North, 1990, p.3). In general, poor countries have weak and immature institutions. While we would subscribe to the now orthodox view that the quality of institutions is a, if not the, critical determinant of economic performance (Acemoglu and Robinson, 2012), all that is needed for the purposes of this section is an acceptance of the strong correlation between the two: richer countries generally have better institutions.

We illustrate this stylized fact using our comparison of Australia and PNG, and 2015 World Governance Indicators data on ‘government effectiveness’. Australia is ranked in the top 10 per cent of countries when it comes to government effectiveness; PNG in the bottom 30 per cent.

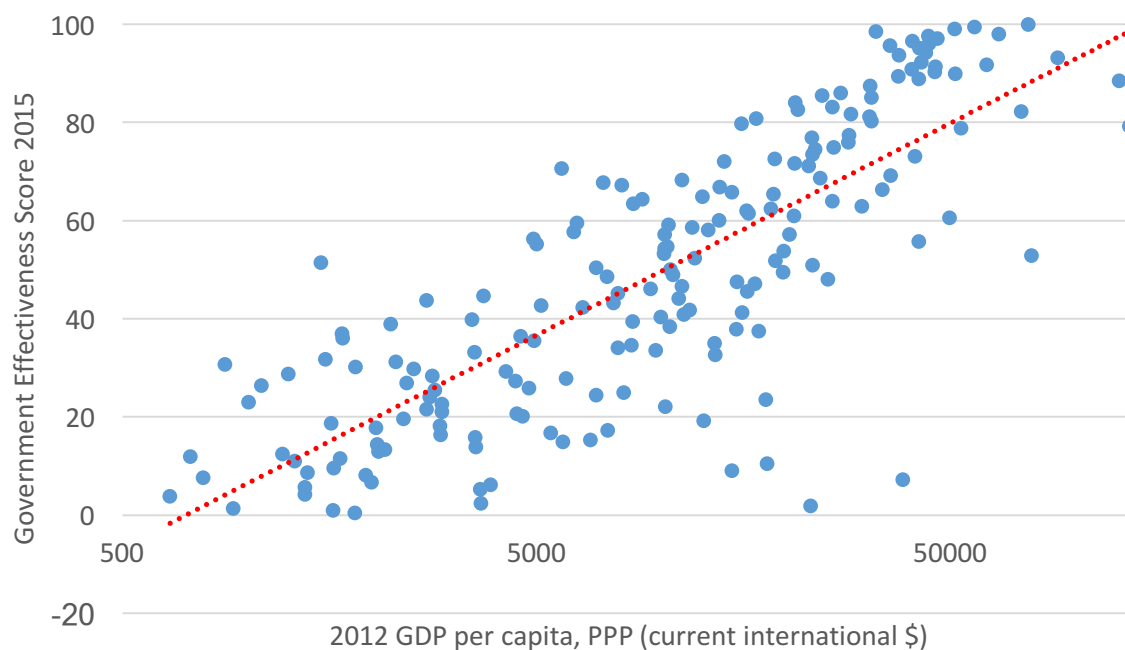
Figure 3: Percentile ranking for government effectiveness, Australia and PNG (higher is better)



Source: World Governance Indicators

More generally, Figure 4 shows the strong cross-country correlation between government effectiveness and per capita income.

Figure 4: The correlation across countries between government effectiveness and income per capita



Source and notes: World Development Indicators. The red dotted line is a trendline. The government effectiveness score is a percentile ranking.

The presence of weak institutions makes it less likely that good policies will be adopted, even if evidence is found in their favour. This can be understood in political terms. Institutions are an outcome of politics (Acemoglu and Robinson, 2012); and institutions are therefore weak if political incentives are not well-aligned with the welfare of the population. If there are only weak incentives to improve policies, then little improvement will happen.² The binding constraint will not be a lack of solid evidence, but a lack of will to take that evidence and its implications seriously. For example, if

² This discussion raises the interesting question of the difference between policies and institutions. If institutions cover all the rules of the game, then policies are simply a sub-set of institutions. But institutions are perhaps more sensibly thought of as the fundamental rules of a society. Policies can be regarded as rules that can be changed holding institutions constant. For example, giving a Central Bank independence is an institutional change. If the policy rate of interest is changed – by the independent Central Bank or any other part of government – that is a policy change.

politics are clientelistic and politicians are thus more interested in providing private goods to their supporter rather than public goods to all citizens, then there will be little interest in proposals to focus more on public goods, and even less on how to supply public goods more efficiently. Such research, and the recommendations based on them, might be literally regarded as merely “academic”.

Another way to think about this problem is that weak institutions manifest themselves in limited capacity. Indeed, this is what the government effectiveness metric, graphed above, tries to measure. Limited capacity means that governments struggle to absorb good research and implement policy. Of course, these two arguments converge since limited capacity is itself a symptom of a politics that gives little weight to development objectives. Sause (2008) has investigated “the state of policy advisory capacity” in PNG’s central government agencies. He finds “pervasive and systematic” problems which limit this capacity, arising from “a variety of interlocking (and often interwoven) problems from both the political and the administrative and organisational dimensions within which policy advice is developed and delivered.” (Sause, 2008, Abstract).

If institutions are so important, it would seem obvious to focus on improving them. Indeed, at first, it might seem like an advantage from a reform perspective to be in a country with weak institutions as it gives rise to the possibility of rapid catch up. Just as poor countries don’t need to develop their own technology in order to have productivity growth—they can instead import the technology from advanced economies—so it might be thought that poor countries can short-cut the arduous process of developing good institutions by importing institutions from advanced economies. Should not researchers then focus their efforts on institutional design? Unfortunately, this line of argument, while superficially convincing, neglects three factors which make institutional improvement far more difficult than technological catch-up.

First, it is difficult to find convincing evidence in favour of a particular institutional set up. Institutions that work well in one country might not work well in another. As Rodrik has written, ‘It is easier to list the functions that good institutions perform than it is to describe the shape they should take’ (2008, p. 100). Second, it is not clear which institutions make a difference; that is, which are the ones that really retard progress. For example, how much of a drag on growth is corruption? This is still not something on

which we have a convincing, clear-cut answer (compare Khan, 2004 with Campos *et al.*, 2016). As a result, it is not clear which institutions most need to be reformed to promote development. Third, as already noted, institutions are the outcome of political forces. Domestic political forces normally only change slowly or, if abruptly, not necessarily in a positive direction.

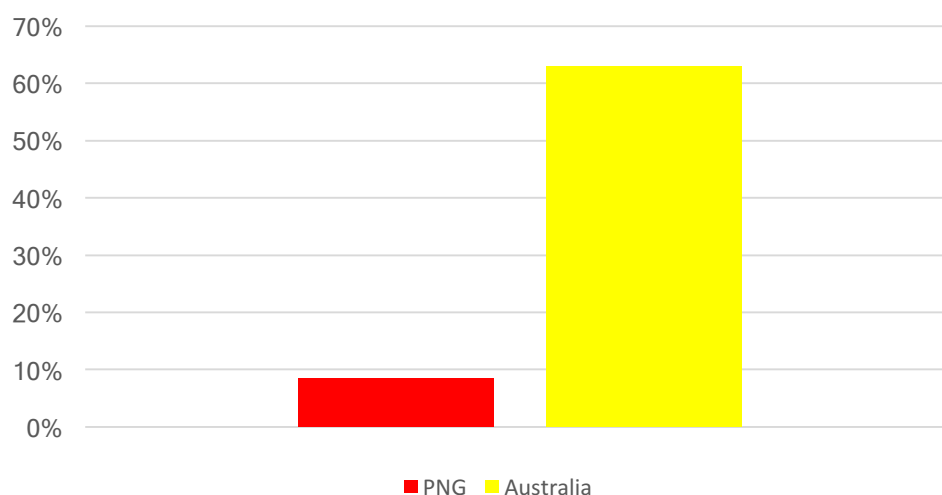
Far from poor countries being able to catch-up quickly in terms of institutions, international evidence suggests that in many countries it is not easy to improve institutions, even if weaknesses are glaring, and it is obvious what needs to be done. Most poor countries are in what is called a 'capability trap'; that is, their institutions improve only glacially, if at all (Pritchett *et. al* 2010). Moreover, just because institutions in general improve only slowly does not mean they do not change at all. Indeed, institutions in developing countries can change quickly over time; just not necessarily in a positive direction.

PNG and Australia provide a good example of this in the area of decentralization: the division of power between provincial and local governments. PNG is divided into about 20 provinces. Most provinces, except for the smallest, are divided into two or more districts, for a total of 89 districts. PNG's parliament is made up of representatives of districts and provinces. Over time, not surprisingly given the balance of numbers, power and funds have shifted from provinces to districts. In the 2000s, the focus was on getting more funds to provinces through provincial function grants. But this decade, there has been a massive increase in grants and responsibilities devolved to the district level, through much larger District Support Improvement Program grants. This state of flux has made it very difficult to develop an effective decentralization policy. The politics of decentralization need to be settled first. By contrast, in Australia, where local governments are under the control of state governments, and are not aligned with electoral boundaries, the distribution of powers and funds between state and local governments is well-settled. Changes in this distribution of decentralized powers in Australia would be much more difficult to achieve than in PNG, but, on the other hand, in Australia one has a solid institutional base on which relevant policy reforms involving state and local governments can be and are pursued.

Limited options

The economies of poor countries are dominated by the informal sector. In PNG, less than 10 per cent of the working-age population is engaged in the formal sector. In Australia, the figure is about 60 per cent (Figure 5).

Figure 5: The formal sector participation rate in PNG and Australia



Sources and notes: ADB 2014 & AIHW 2015. The formal sector participation rate divides the size of the formal sector by the size of the working age population. PNG data from 2009/10, and Australian data about 2014. In Australia, it is assumed that everyone working is in the formal sector.

Cross-country data on the relative size of the informal sector are hard to come by, but we can use the rural population as a proxy since typically rural areas are more dominated by informal activities than urban ones (ILO, 2015). In Figure 6, we see a close, negative correlation between the variables of interest, in this case informality (as proxied by the rural population share) and income per capita

Figure 6: The correlation across countries between the rural population share (a proxy for informality) and income per capita

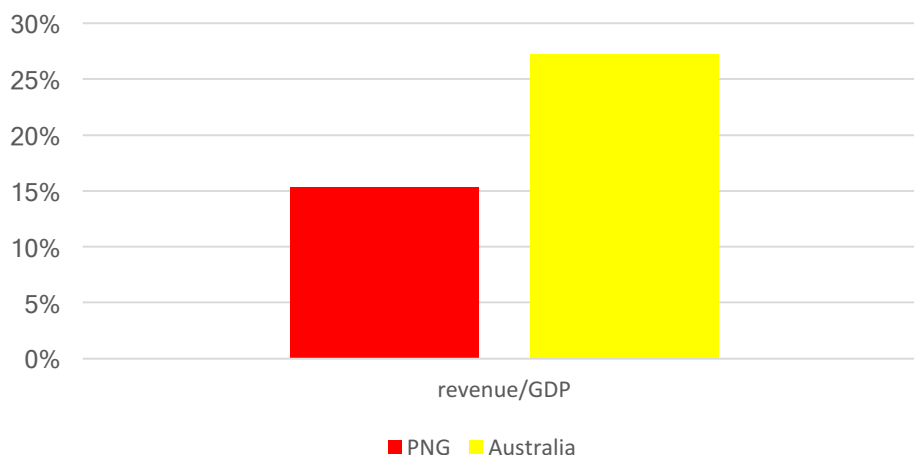


Source: World Development Indicators.

The relative prominence of the informal sector makes evidence-based policy making more difficult in developing countries for the simple reason that by definition the informal sector is less under government control or subject to government reach. In essence, the greater share of the informal sector reduces the options open to government. If there are fewer policy decisions that can be made, the scope for using evidence is accordingly reduced.

This can be illustrated more concretely in several ways. First, the greater size of the informal sector is the fundamental reason developing countries have a lower tax/GDP ratio than developed ones. This is certainly the case for PNG and Australia. The former has a revenue/GDP ratio of about 15 per cent; for the latter it is nearly 30 per cent (Figure 7).

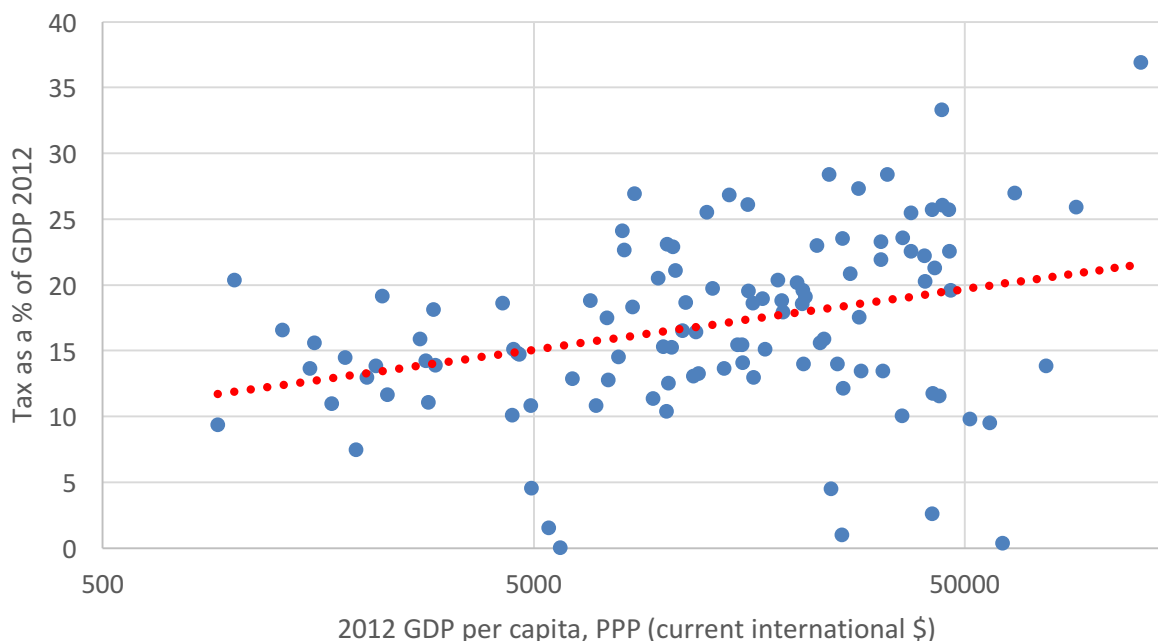
Figure 7: Revenue/GDP ratios in PNG and Australia



Source: PNG budget documents (2017 budget estimate); Australian data from Australian Government 2015 and relates to 2012.

The positive cross-correlation between tax/GDP and GDP per capita is shown in Figure 8. The correlation is quite weak. Other factors are also clearly important. Resource-rich countries tend to have higher tax/GDP ratios, for example.

Figure 8: The correlation between tax/GDP and income per capita



Source: World Development Indicators

While other factors are important, Figure 8 nevertheless confirms that governments in poor countries generally have fewer resources to allocate not only because their economies are poorer, but also because they can lay claim to a lesser share of those economies. As a result, these governments have far fewer resources which can be deployed in response to good policy suggestions. One might find the evidence, but not the funds.

The composition of government expenditure and revenue is as important as its size. In general, direct taxes and transfers are much less important in developing countries than they are in developed ones. Bastagli *et al.* (2012) confirm that developed countries do on average have much higher tax/GDP ratios.³ They also reveal important compositional differences. Income taxes make up more than half the total tax take in developed countries, but only a quarter or less in the various developing-country regions.

On the expenditure side, Bastagli *et al.* (2012) also show that transfers make up 15 per cent of GDP in developed economies but only about 2 per cent in Asian economies and 1 per cent in sub-Saharan Africa. It is not that targeted transfers are impossible in developing countries. Proxy indicators like a lack of consumer durables can be used, as in India for example, to assess whether a household is poor and thereby institute targeted cash or other transfers programs. But targeted transfers are certainly more difficult to make in developing countries. For example, schemes of employment insurance are simply impossible to implement in developing countries, since informal employment is non-verifiable.

The contrast can certainly be seen in the case of PNG and Australia. Both countries have highly progressive direct tax systems. In PNG, however, only a small minority are subject to the direct tax system, whereas in Australia virtually the entire workforce is covered. Australia also has an extensive and complex system of direct transfers, including universal, means-tested age pensions, disability benefits, and unemployment

³ On average, developed economies have a tax/GDP ratio of just over 35 per cent. The four developing country regions of Latin America, Middle East and North Africa, Asia and Pacific, and Sub-Saharan Africa all have a tax/GDP ratio of 20 per cent or less.

benefits. Formal sector employees in PNG receive superannuation benefits, but none of the transfer schemes evident in Australia operate in PNG at the national level.⁴

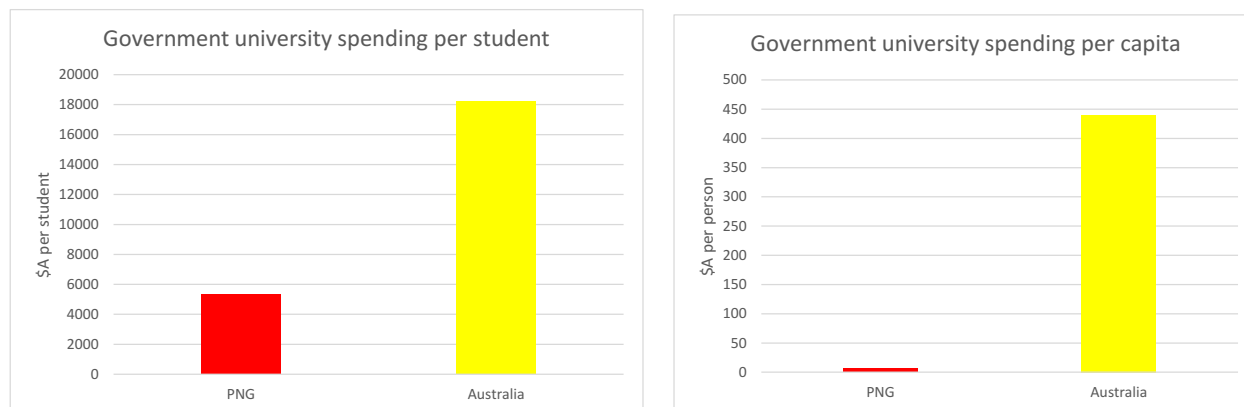
Limited research capacity

So far, we have looked at what might be thought of as demand side factors hindering evidence-based policy making in developing countries: factors that reduce the incentives for good policy, and that reduce the policy options open to government. In summary, the argument of the paper so far is that, on the demand side, poor institutions make it less likely that good policy suggestions will be implemented, and a large informal sector reduces the policy options open to governments. In this section, we turn to supply-side factors that make evidence-based policy making more difficult to implement. Here the relevant stylised fact is that universities and think tanks in developing countries are generally small in size and of low quality.

The contrast between rich and poor countries in this regard is shown clearly by Figure 11, which compares per capita spending on university education in the two countries. PNG spends only \$6 per person on university education; Australia spends more than \$1,000. This ratio of more than 100:1 is far greater than the ratio of per capita incomes which is approximately 15:1. PNG not only puts far fewer students through universities and spends only a fifth of what Australia does on each of them.

⁴ One resource-rich PNG province, New Ireland, operates its own cash transfer program.

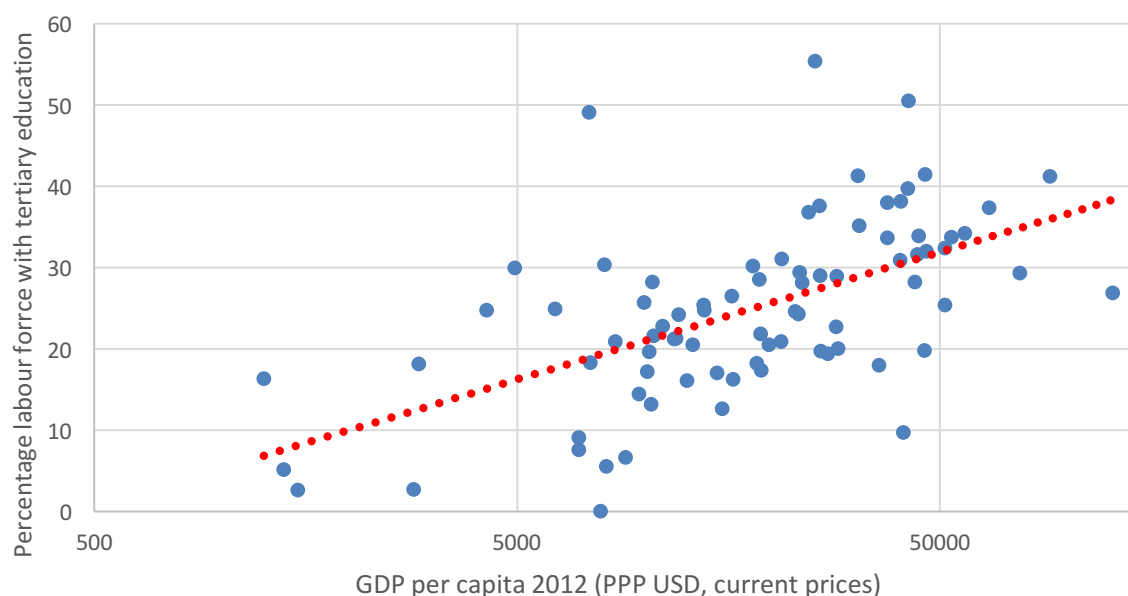
Figure 11: Per capita and per student university funding in Australia and PNG



Sources and note: Total spending for four state-owned universities in PNG (2015 actuals) from budget documents divided by estimates of the student body and population. For Australia, government spending per student and total number of students from Universities Australia (2015), for 2015 with Census population estimate for that year. Current exchange rate used (university salaries are lower in PNG, but the purchasing power of salaries is similar if not higher in Australia).

Comparable cross-country data on tertiary education is hard to come by. Instead, we can use the share of the labour force with a tertiary education as a proxy (Figure 12). There is a strong positive correlation between the share of the labour force with a tertiary education and income per capita.

Figure 12: The correlation across countries between the share of the labour force with a tertiary education (a proxy for education spending) and income per capita



Source: World Development Indicators

A smaller share of spending on tertiary education would not necessarily be a problem for evidence-based policy making if the education sector in developing countries was, although small, of high quality. However, this is rarely the case. The quantity and quality of tertiary education move together, at least to a certain threshold. Education spending per student is typically much lower in developing countries than in developed ones, as the comparison between PNG and Australia illustrates (see the second graph in Figure 11 above). Partly as a result of fewer resources, universities in developing countries have a greater focus on teaching, and a lesser focus on research—including, therefore, a lesser focus on research into policy questions.

A good measure of the quality of tertiary education in a country is the ranking of its universities. While there is no doubt that the ranking by quality of universities is a far from perfect science, it would be a mistake to write off any such ranking as a meaningless exercise. Two of the most popular and comprehensive rankings are the QS World University Rankings and the Times Higher Education World University Rankings. As Table 1 below shows, only 4 of the top 100 universities (according to the QS World

University Rankings) or 2 (according to the Times Higher Education World University Rankings) are located in a developing country, namely, China.⁵

Table 1: The most represented countries in two top-100 world university rankings

Countries	QS World Universities Rankings 2016-2017	Times Higher Education World University Rankings 2016-2017
United States	32	41
United Kingdom	18	12
Germany	4	9
The Netherlands	2	8
Australia	6	6
Japan	5	2
Canada	4	3
China	4	2
Hong Kong	4	3

Source: Bridgestock 2016

Economics is one discipline widely regarded as critical for evidence-based policy making. A qualitative comparison between Australia and PNG is useful in this context. There is only one university where students can study economics in PNG, namely the University of Papua New Guinea (UPNG). In Australia, there are dozens. At UPNG, in 2014, there were only two lecturers in the Economics Division. The situation has

⁵ While Hong Kong is part of China, it still functions separately, and certainly in this context is best thought of as a developed economy, rather than as part of a larger developing country.

improved slightly since then due to the provision of visiting lecturers from The Australian National University (ANU) (with funding from the Australian aid program), but at the time of writing there are only four lecturers in the Economics Division. Any one of the dozens of universities teaching economics in Australia would have a stronger faculty. Little research is carried out by the UPNG Economics Division, though again there has been some improvement in recent years as a result of the ANU partnership.

Of course, universities are not the only place where economic or policy-related research is carried out. Papua New Guinea is fortunate to have two think tanks, the National Research Institute (NRI), which is government funded, and the Institute of National Affairs (INA), which is funded by the private sector. Both the NRI and INA make a valuable contribution to economic research in PNG. But they are relatively small institutions, and thinly stretched. Australia has a much more robust network of think tanks, both government-funded, such as the Productivity Commission, and non-government-funded, such as the Grattan Institute, the Centre for Independent Studies, and the Australia Institute, to name only a few.

The limitations pointed to in this section not only act as constraints to the supply of evidence for policy-making in developing countries. They also limit contestability: the ability of think tanks and universities to question official wisdom, and suggest an alternative narrative. This in turn leads to a greater prospect of policy capture of the dominant public sector institutions, such as The Treasury and the Central Bank, and an increased likelihood that evidence, even if it is available to support an alternative policy position, will be ignored if it is politically inconvenient. PNG has recently seen major changes in its exchange rate regime away from a floating towards a fixed exchange rate (IMF 2016). This has not gone unnoticed, but nor has it been accompanied by the sort of lively debate one would expect if a similar seismic shift in economic policy occurred in, say, Australia.

Foreign aid

So far we have considered various disadvantages that developing countries have to contend with in relation to pursuing the desideratum of evidence-based policy making. But developing countries also have an advantage. They receive foreign aid, and much foreign aid is intended to help with better policy making. To what extent does this actually compensate for the other difficulties?

Foreign aid is still significant for low income and, to a lesser extent, lower-middle income countries. In 2012, low income countries on average received aid worth 9.9 per cent of their GDP. Lower-middle income countries received aid worth on average 0.8 per cent of their GDP. For upper-middle income countries, however, the ratio was only 0.1 per cent. Developed countries receive no aid, though they do occasionally receive international assistance following disasters and financial crises. PNG receives foreign aid worth about 5 per cent of its GDP. We can certainly conclude that aid is a significant volume of funds for the poorer of the developing countries, though it also needs to be recalled that most of the world's countries are nowadays middle rather than low income.

Aid is provided for a whole variety of reasons and causes. Aid is given as disaster relief, food aid, budget support and debt relief. Most aid is given to fund sectoral projects, whether to build a new road, or to strengthen teacher training.

Another important form of aid is technical assistance or cooperation. On average, about one quarter of all aid is given as technical assistance. Australia in general is more focused on technical assistance than this. At times, as much as 60 per cent of Australian aid has been given as technical assistance, with the current figure sitting around 40 per cent. Technical assistance is itself given for a range of reasons, but in general it is given to strengthen institutions and improve policy making. Indeed, technical assistance can be viewed as the public sector equivalent of foreign direct investment. Just as foreign direct investment is a transfer mechanism by which developing countries can access advanced industrial technology, so technical assistance is a mechanism by which developing countries can access developed-country public-sector processes and

reforms. Perhaps the most typical use of technical assistance is the provision of advisers to government departments to improve capacity for policy reform and implementation.

Another form of aid explicitly directed at improving policy is budget support given on the basis of reform conditions. Less than ten per cent of aid is given as budget support. Evaluations of budget support vary widely, but the more positive ones claim only a modest role for it (Mosley et al. 1995).

To what extent is aid able to compensate for the disadvantages that developing countries face? Some claim that aid in fact is a negative for the countries that receive it. Angus Deaton among others claims that aid undermines institutions (Deaton 2013). Evidence for this claim is limited though, and in fact there is evidence in the opposite direction (summarized by Wood, 2016).

While it seems unreasonable to claim that aid in fact makes things worse, how much does it make it better? There are certainly positive examples of policy and institutional transfer. One of them is provided in this book: income-contingent loans. However, in general, the track record of using aid to promote reforms is limited if not disappointing (Andrews, 2013).

First, reforms are determined by domestic politics, and the influence of outsiders, even cashed-up outsiders, is normally limited.

Second, OECD institutions and policies may not in general be appropriate for developing countries. The practice that Evans (2004) refers to as “institutional monocropping” may be sub-optimal.

Third, even when countries adopt the recommended reforms, the adoption might be only skin deep, or in form rather than substance. Pritchett *et al.* (2010) highlight the phenomenon of “isomorphic mimicry” by which developing countries pretend to adopt developed-country reforms to keep donors happy, but in which their underlying institutions in fact do not change. The World Bank (2017, p.92) shows that the gap between formal rules and actual practice is greater in poorer countries. For example, many developing countries have adopted anti-corruption institutions without making a dent on the level of national corruption (Kuria, 2016).

Fourth, the literature recommends, as a result of the disappointments associated with foreign aid, that donors promote home-grown, iterative solutions (Andrews *et al.*, 2017). They also recommend that they look for opportunities for politically-feasible, incremental reform—a more realistic option compared to seeking wider-ranging institutional change (The Asia Foundation 2011). These ideas sound promising, but they also suggest that the role of aid is limited, and that at best it is a partial rather than full compensation for the other difficulties developing countries face in implementing evidence-based policy.

The history of aid to PNG provides a rich range of experiences that illuminate the limitations of aid in promoting policy and institutional reform. An interesting example is the National Road Authority (NRA). It was set up to secure funding for road maintenance with much encouragement and assistance from the Asian Development Bank. Since its creation in 2003, however, the NRA has never been funded more than tokenistically. A miniscule tax of 0.04 Kina (about \$A0.02) per litre of petrol provides next to no funding for it (\$AUD7 million in 2014 or 1.5 per cent of all government spending on road maintenance and rehabilitation), and makes it impossible for it to play anything resembling the role intended for it (Dornan, 2014, 2016).

Another interesting example is the Sovereign Wealth Fund (SWF), which PNG finally established in 2015 after having agreed with Australia to establish it in 2009 and having subsequently received considerable assistance to do so. The establishment of the SWF was controversial, and PNG took so long to set it up that, by the time it did, its resource boom was well and truly over. Perhaps the SWF will be of assistance as a savings mechanism next time the country has a resource boom, but significant questions raised about its design (Osborne 2015) make even this uncertain.

A more positive example is the provincial function grants mentioned earlier. This scheme was also established with Australian assistance and encouragement. The increased funds that have flown to PNG's provinces through these redesigned grants are generally reviewed as responsive to PNG's needs. The establishment of the requisite formulae was based on significant domestic input, rather than a simple transplanting of best practice (ODE 2009). Nevertheless, even for this positive example, there is the risk that good policy will be trumped by institutional change. The earlier-noted shift in

PNG's approach to decentralization, with its much greater emphasis on districts rather than provinces, has already resulted in a dwarfing of the provincial function grants by new district grants, and raises serious questions about the long-term viability of the provincial grants.

Conclusion

An environment conducive to evidence-based policy making is one in which there are strong incentives for good policies to be adopted, capable institutions to implement them, a wide range of domains within which good policy can be adopted, and a ready supply of well-developed policy proposals. These conditions are all more likely to exist in developed than developing countries. Developing countries on the other hand have the advantage of foreign aid. Much foreign aid is dedicated to the purpose of facilitating evidence-based policy making. But at best this is a partial compensation for the other problems faced by developing countries in striving to base their policies more firmly on sound evidence.

This is not a counsel for despair. One of the most important stylised facts of development is the "growth triangle", which shows that while developed countries grow at slow, steady rates over decades, developing countries show much more variation, with the extent of variation growing the poorer the countries were at the start of the period of analysis (Jones & Romer 2010). Most developing countries have the potential for rapid growth based on technological catch-up, but only some of them are able to realise that potential. Those that do realise that potential are in general those with good institutions, or at least those that have a political dynamic that supports the development of better institutions. As they develop, the constraints around evidence-based policy making are weakened, their institutions improve (or were already good enough to start with), their economies formalise, widening the government's options, and they have more funds to spend on universities and think tank. Clearly not all countries find themselves in such a virtuous circle. Those excluded from it are those with poor institutions and without a political dynamic that will improve institutional quality over time. Implementing evidence-based policy making is a tough ask in such countries.

While this paper is not a counsel for despair, it is a call for realism. There are no easy answers, and evidence-based policy making of course remains an admirable aspiration. It just may be a long way away.

What can be done to promote evidence-based policy making in poor countries given the constraints on them? One promising example in this regard is the African Economic Research Consortium. Jim Adams, former World Bank Vice President, has written as follows concerning the AERC:

In the mid-1980s when the call for structural adjustment was at its peak in Africa, a clear sense emerged that too much of the debate on reform and adjustment was dominated by donors. The local capacity involved was both too small and of limited depth. The near total absence of solid economic analysis emerging from within the continent was an obvious gap requiring action. There was a parallel concern about the quality of the economic training within the region. In direct response, an effort was led by a number of donors to put in place support for developing a network of qualified policy-focused economists.

Called the African Economic Research Consortium (AERC), it began operations in 1988. From its initiation, the AERC included a program of funding and training young economists in the area of economic policy, with a strong focus on quality and regular workshops to exchange ideas. Today, governments across Africa see AERC-funded work as central to their policy-making processes. They are no longer totally dependent on outside researchers and donors. AERC graduates are increasingly taking on senior policy positions across Africa. The AERC itself has expanded from the original three countries in which it began to cover the entire continent. (Adams 2013)

Adams concludes that 'The AERC model can't be directly copied, but its accumulation of 25 years of successful experience does provide some useful guidance for ... donors on how to go about the critical task of building the economic capacity required to promote and sustain economic reform' (Adams 2013).

While economics is important, one might reasonably generalise this advice to cover those disciplines relevant to public policy more broadly, including political science, and

the study of public policy itself. If we want more evidence-based policy making in the tropics, donors and governments alike should do more to support evidence-gatherers by investing in local universities and think tanks.

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