

1. Introduction

A minority of low-income developing countries have not yet built the state capacity that would facilitate economic growth. In this paper I discuss the research priorities and opportunities around three specific issues within this overarching theme. The first is how these governments might have stronger incentives to grow the economy. While superficially all governments want growth, some do not translate this into day-by-day practical decisions. Governments are not homogenous entities, so the intended audience for this issue is the reformers within government: in effect, the question is what policy priorities, and donor actions, would make them more likely to win their struggles for reform?

The second issue is about the distinctive economic policies that these governments might adopt that would promote the recovery of the economy. The emphasis here is upon those policies that are distinctive to conditions such as post-conflict and the early stages of recovery from prolonged poverty and stagnation. I focus on policies that might speed the recovery of private investment; on which sectors are likely to have the best opportunities for early growth and the impediments that could be eased by policy reform; and by the benefits and strategies for employment generation. In each case the issue is, given what we know (at varying degrees of confidence), what important policy choices might be informed by feasible further research.

The final issue is how might the delivery of basic social services be improved in the conditions typical of these difficult environments? The citizens of these countries are among the neediest on Earth and meeting their needs requires approaches that work swiftly given the current limitations of state performance, rather than being dependent upon solutions to the problems of state capacity that can only work in the long term.

2. Incentives for Governments to Promote the Private Economy

Low per capita income is now avoidable if governments adopt policies that are conducive to private economic activity, such as a legal system which protects contracts and property rights. Hence, one likely explanation of for the persistence of low income is that the government lacks the incentive to promote growth. Historically, the most common motivation for governments to adopt growth-conducive policies was the need for tax revenue, although other motivations may also be important.

Promoting revenue-motivated growth

Growth generates government revenue conditional upon an effective tax system. Hence, an important current hypothesis in political economy is that government investment in the machinery of effective taxation is a precondition for development, not so much because of what tax revenues buy, as because they induce the government to provide a legal system (Besley and Persson, 2008). Some governments have chosen not to build an effective tax system, and hence,

on the above hypothesis, lack the incentive to provide the rule of law. Presumably this is because either the costs of building effective tax administrations are atypically high, or the benefits are atypically low. Revenue-motivated growth could be promoted by addressing these impediments and I consider them in turn.

Costs might be atypically high in some states because of the lack of skilled personnel, or because norms of corruption have become so entrenched that taxation merely generates income for tax collectors rather than the state. Clearly, the costs of tax collection vary between states. The degree to which the economy is monetised, the degree to which transactions involve third parties, or generate written records, and the proportion of transactions flowing through choke points such as ports, are all observable. Further, in something approaching a natural experiment, in some countries the IMF encouraged governments to take revenue-raising away from the civil service and give it to Independent Revenue Authorities which selectively rehired staff, and paid higher wages in return for monitored performance. There may be scope for research on whether variations in the costs of tax revenue, both between countries and over time (including quasi-exogenous institutional innovations such as the IRAs), explain the emergence of the rule of law and subsequent economic development.

The benefits of building a tax system might be atypically low for several reasons. Building state capacity is an investment, and so one possible explanation for a lack of investment would be if some governments had atypically short time horizons. However, despite the prevalence of coups and rebellions, the incumbents of many dysfunctional states have enjoyed long tenure, so this explanation seems, at least superficially, to be unlikely. It is potentially testable because our knowledge of the risks faced by incumbents has now advanced to the point at which expected tenure could be modelled.

A second possible explanation as to why the benefits of a tax system might be atypically low is if there are alternative sources of revenue. The most prominent alternative sources are aid and resource rents. Since both are important in dysfunctional states, this explanation has some plausibility. It is clearly a testable proposition: states vary considerably in aid receipts and the Tavares (2003) approach is a reasonable way of tackling endogeneity. Similarly, their natural resource revenues vary considerably over time and the component due to world prices can reasonably be treated as exogenous.

If this model of state development and its impediments is right then its implications for policy are radical. Aid, especially in the form of budget support, and revenues from resource extraction, should both be curtailed in these environments. Aid could be confined to modalities which kept it out of government control, avoiding fungibility by being tied to expenditures that the government would not itself wish to provide (i.e. the opposite of 'country ownership'). Revenues from natural resource extraction could be curtailed either by the Chinese model of selling extraction rights directly for infrastructure rather than for revenue, or by the radical option of

discouraging resource extraction itself (e.g. by imposing international conditions on companies that made these environments unviable).

A third possible explanation for atypically low benefits from investing in tax capacity is that the economy is currently so small and informal that the investment would not pay off until the distant future. In other words, economies have to grow to a certain size and formality exogenously before investment by government in a tax system is a paying proposition. For example, the much slower rate of state formation in post-Roman Britain than in post-Roman continental Europe is sometimes attributed to the exceptional and total collapse of the post-Roman economy in Britain so that there was no basis for revenue (Wickham, 2008).

The policy implications of this explanation are radically different. Leading with tax effort might even be detrimental. If the formal economy is only a small proportion of the overall economy then even a modest ratio of tax/GDP may have significant disincentive effects. Further, if reported profits cannot be trusted, *de facto* tax collection may depend upon observable signs of profitability of which the most obvious is investment. In contrast, aid and revenues from resource extraction may now be benign, financing the initial development of the economy to this critical level at which the government chooses to invest in tax capacity.

A fourth explanation for atypically low benefits from tax revenue is if the governing elite would not benefit significantly from public spending. If, for example, the core interest of the elite is for private goods rather than public goods, public policy might be most effective if it generates direct opportunities for elite rents, rather than raising revenues which are then appropriated by the elite. Historically, the counter to this argument has been that elites benefit from public spending on property rights and defence, since this maintains their own power. However, leaders may gain patronage from the insecurity of property rights, and if the main threat to the regime is from coups and rebellions rather than from international invasion, high military spending may have ambiguous effects on elite security. Famously, Mobutu chose not to spend on his army. Other than security, the elite may indeed perceive little benefit from public goods: poorly-motivated public employees may be unable to provide services at a quality which satisfies elite tastes, and donors may insist on a composition of public spending that favours low-income groups.

If this explanation is correct, the policy implication may be that the international community should either decisively override elite interests or acquiesce to them. Power-sharing structures, such as GMAP in Liberia, and the Interim Commission in Haiti, by limiting the ability of elites to frustrate development, may enable the economy to develop to the level at which interests change. But the other extreme, in which donors give governments the freedom unashamedly to serve elite interests, might also work by aligning elite interests with growth: the conventional donor conditionality discouraging defence spending and encouraging expenditures on primary education and primary health care could therefore inadvertently be detrimental.

Non-revenue motivations for growth

Although the desire for revenue is one obvious reason why governments might want to promote private economic activity, there are others.

One alternative to revenue motivation is if governments become accountable to well-informed citizens. Faced by such accountability, governments which wish to survive have no choice but to focus on developing the economy. A potential advantage of accountability as a way of motivating government is that it provides a more generalized influence on the composition of public spending that just efficacy for growth. Thus, whereas a revenue-motivated government would indeed choose to invest in the rule of law, an accountability-disciplined government would also spend on public goods that enhanced general wellbeing but were not cost-effective investments from the perspective of elite interests, such as health and education.

Historically, accountability to citizens followed, rather than preceded, economic development. However, now that the accountability of government to citizen is common, it may be possible to use international pressure to reverse the historical sequence. Since the fall of the Soviet Union there has been just such an attempt targeted on the governments of low-income countries. Although to date, this attempt has largely been unsuccessful, it may have failed because of the particular strategies adopted (such as the priority given to elections over institutions). In this case, the appropriate international policy would be to revise and reenergize efforts for accountability, perhaps by harnessing new technologies to inform citizens.

Another way to motivate government is nationalism. Arguably the governing Chinese elite is concerned neither to maximize state revenues, nor to serve the preferences of ordinary citizens, but rather to build a country that is strong and respected. Not only does nationalism provide a motivation for effective government, by motivating ordinary public sector employees, both tax collectors and service providers, it lowers the costs and raises the benefits of taxation. On this account of state capacity, the key policy is building a shared sense of identity. Although historically identity has usually grown out of international conflict (making the testing of revenue-driven motivation versus identity-driven motivation difficult), Miguel et al. (2004) demonstrate that identity can be built by less costly policies.

Implications for a research agenda

The state has a critical role in promoting private economic activity through providing the rule of law (and other public goods). Hence, to explain failures in the rule of law a starting point is that government lacks sufficient interest in economic growth to provide these public goods. Above I have sketched several possible reasons why a government might lack such an interest. Unfortunately, the policy implications of these different explanations are radically different, yet we do not currently know which is correct (whether generally, or conditional upon context). The historical evidence from the development of the OECD states points to the stimulus as being the

need for revenue to counter international security threats, but this is perhaps of only limited relevance because of the major changes in the international environment.

One approach to adjudicating between the various explanations would be to take as the pertinent population all the states that at time X were low-income and lacked the rule of law. Time X should be well after independence, so that domestic political forces had time to reshape their colonial inheritance, but sufficiently distant from the present that several of these societies have subsequently built the rule of law (and related public goods). Research could then investigate the sequences best-suited to building the rule of law in contemporary conditions.

3. How to Promote the Economy

I now turn from the issue of motivation of government to the economic policies, beyond building the rule of law, which a government might take to promote an economy that starts from poverty and stagnation such as is commonly the legacy of internal conflict. Such economies are distinctive in being capital-scarce, in the structure of opportunities, and in the importance of employment generation.

Investment

Poverty, stagnation and conflict leave a distinctive economic legacy. Investment in both physical and human capital will have been below replacement rates. The counterparts of underinvestment are accumulated unexploited opportunities for investment, and accumulated offshore assets in the form of flight capital and a diaspora. Private investment faces atypically severe impediments of risk, infrastructure and regulation. Applied research could potentially quantify these impediments and the practical scope for addressing them.

Risk

As to risks, Svensson (2000) shows that whether unexploited opportunities for investment are taken up in a low-income post-conflict society depends upon the 'bad news principle': what matters is the severe downside risks. These risks are largely concerned with fears of government actions so that potentially the government can address them either by adopting commitment technologies, or by other actions that reveal its type to be investor-friendly. There is scope for analytic and empirical work here. Analytically, governments often do not understand the bad news principle, the rationale for commitment technologies, or that an effective signal is an action too costly to be imitated by a government that is not genuinely investor-friendly. Empirically, there is good data both on FDI and on perceived investor risks. Hence, it should be possible to quantify how sensitive private investment is to specific risk-reducing actions?

Infrastructure

There has been little quantitative work on the returns to infrastructure in the poorest societies. However it is now becoming researchable. For example, a new IMF database (Arslanalp,

Bornhorst, Gupta and Szel, 2010) provides time series estimates of the public capital stock for many countries up to 2003, and the World Bank is in the process of generating further data. The IMF study also estimates the return on public capital. These are the necessary building blocks for estimating the legacy of under-investment. While such estimates could not be definitive, they would be a considerable improvement on the wish-lists drawn up for the typical post-conflict donor pledging conference.

Regulation

On regulatory policies for investors the World Bank's *Doing Business* surveys now provide an objective and comparable measure. Potentially, such data sources could be used to compare the pay-off to risk reduction, infrastructure and regulatory reform as means of attracting private investment.

Capital repatriation

Foreign investors typically start from considerable ignorance about low-income, post-conflict societies because there has been little point in acquiring information. The best-informed, and therefore the earliest investors, are likely to be the diaspora, and the owners of flight capital. They constitute major opportunities for the poorest societies: often most of their capital and skills are abroad. The scope for reversing flight has been little studied but appears to be a function of the standard variables of expected returns and perceived risk (Collier, Hoeffer and Pattillo, 2004). Data on capital flight remain poor, but can be inferred indirectly through several standard approaches.

Diaspora return

The scope for the return of the diaspora is a researchable process which, to my knowledge, has not been the subject of much quantitative study. Stocks of emigrants return at very different rates to different low-income (and post-conflict) societies from the same country of emigration and this is now readily observable from OECD census data.

Sector-Specific Issues

In a low-income economy with a legacy of poor infrastructure and regulation, and high perceived risk, the tradable sector is likely to be uncompetitive. The sole exception will be where there are location-specific rents as with resource extraction. Most business opportunities are therefore likely to be in the non-traded sector. Within the non-traded sector, the key sub-sector is likely to be construction because it supplies the non-tradable capital goods (structures) that complement investment in equipment.

Natural resources

By far the most important private investment that post-conflict countries are likely to attract is for resource extraction. Resource extraction does not usually generate many jobs, but it does generate rents which can be appropriated by government. The potential sums involved are enormous relative to all other aspects of the economy. Afghanistan is now estimated to have \$1 trillion of unexploited sub-soil assets, and more generally, in the low-income countries discovered sub-soil assets are only around one-fifth per square mile that of the OECD. These are the last frontier for discovery.

Managing the discovery and extraction process faces highly particular problems of agency, asymmetric information and time-inconsistency. Failure to address these problems can lead both to under-exploitation (hence the low incidence of discovery to date), and to very low rates of revenue-capture for government. These issues have not been adequately investigated using analytic and quantitative techniques in the context of the poorest countries. One of the few such studies, by Guidolin and La Ferrara (2007), illustrates why common sense is unlikely to be sufficient. They study the impact of peace in Angola on the valuation of foreign private investment in diamond extraction. Contrary to expectation, they find that peace *reduced* the value of these investments. Many resource extraction companies are publicly quoted and so have market valuations and are required to release information about their activities. There are also new databases on contracts and revenue payments being generated through transparency initiatives, notably EITI.

The astounding pay-off to research on auction theory that netted the British government £20bn from selling 3G mobile phone rights, illustrates the potential pay-off to research on managing resource extraction. At one end of the spectrum, the government of Iraq recently auctioned management contracts for the extraction of oil from existing wells, getting a highly advantageous deal in which the government retains all the oil and pays reputable oil companies a modest service fee per barrel extracted. At the other end of the spectrum, many post-conflict governments sell the rights to resource extraction through opaquely negotiated deals with obscure companies that acquire option rights to resources which they need not exploit for many years. There is considerable observable international variation in the rate of rent capture, and in investment rates. Some of this variation is because differences in objective conditions, such as geology, affect optimal choices. However, much of the variation is probably because some governments make major mistakes, or cannot overcome their internal problems of agency.

Construction

The construction sector is at the heart of the post-conflict recovery. It supplies the non-traded capital goods, mostly purchased by the public sector, such as roads, power and ports, that are fundamental to modern economic activity. The inherited stock is likely to be grossly inadequate.

Because investment will typically have been low for many years, the construction sector will have 'withered away', so that a quantum increase in demand, such as it typical of post-conflict

and policy reform situations, collides with limited supply. The elasticity of supply in the construction sector thus determines whether the sector becomes a bottleneck. Potentially, public policy can flatten the supply curve at several points in the production cycle of a structure: the availability of land can be impeded by unclear legal rights; the availability of key inputs such as cement can be impeded by trade restrictions or transport bottlenecks; the market structure of the construction sector can be insufficiently competitive because of government procurement practices that exclude new entrants; key construction skills can be scarce because of market failure in training.

There is, to my knowledge, no quantitative study of the construction sector in post-conflict and recovery situations, nor any special attention paid to it in policy discussions. There is no international data set and so data would need to be gathered through fieldwork.

Employment

Should employment generation be an objective in post-conflict societies, and if so, how should it be achieved? While economists know plenty about employment generation in general, there is as yet no serious work on the distinctive issues raised by employment generation in post-conflict situations. If employment of young men reduces conflict risk, then employers confer an externality on society. Analytically, the shadow wage is below the actual wage and may even be negative. An old tradition in development economics urged the use of shadow wages in development planning. The key critique of that tradition was that, rather than offset market distortions (wages being set above market levels) it was preferable to break rigidities in the labour market. However, the post-conflict wage distortion is not because of rigidities in the labour market, but because of a potentially very large externality.

Does it affect the risk of conflict?

There is now reasonable statistical evidence that both the level of income and its growth rate reduce the risk of civil war (Miguel et al. 2004; Besley and Persson, 2009). The application to the specific context of post-conflict poses more acute statistical problems, but such analysis that has been feasible finds the same associations (Collier, Hoeffler and Soderbom). Given the inherent plausibility of the hypothesis, and the robust evidence for it in the more general context of proneness to civil war, it seems reasonable to assume that the same relationships hold in the post-conflict context, where risks of conflict are likely to be higher.

Turning from overall economic activity to employment, and in particular youth employment, there is less macro-statistical evidence of a direct link to the risk of conflict. Some studies find associations with the demographic structure of the population, with risk increased by the age group 15-24. While there are many other explanations for such an association, since this is clearly the age group for rebel recruitment, it is a plausible supposition that societies are at risk primarily from their young males, analogous to the distinctive age and gender propensities to violent criminality apparent in virtually all societies. There is, to my knowledge, as yet no

macro-statistical evidence linking conflict risk to the employment opportunities for young males. There is, however, arresting new evidence from a survey of the motivations for recruitment to rebel groups undertaking for the *World Development Report*. The data are not yet released publicly, but find that a lack of employment opportunities is by far the most cited motivation for recruitment, much more important than any grievances of a political nature. The hypothesis is inherently plausible from the micro-theoretical perspective of choices between activities: the choice among employment opportunities is more likely to be motivated by payments (in cash and kind) than by political objectives the payoff to which is a highly uncertain public good in the distant future.

The Holy Grail of the quantitative research of conflict risk would be to be able to compare the efficacy of public resources spent on employment creation for young males against other strategies such as targeted policing, in reducing the risk of renewed conflict in post-conflict settings. Ideally, this would come with an estimate of the rate at which the returns to each strategy diminish so that they can be equated at the margin. Such precision is likely to be beyond the horizon of feasible research. A less demanding objective, which might just be feasible, is to show that resources spent on employment creation are cost-effective in the lesser sense of having a substantial pay-off. Since the costs of conflict are known to be enormous, it follows that almost any effect of employment on conflict risk that is statistically significant is likely to be economically significant. Further, since in post-conflict the resources come predominantly from the international community and are probably highly endogenous to evidence of effectiveness, this lesser goal may be more pertinent than the notional ideal. Since securing the peace in post-conflict settings is a very high international priority, funding is likely to be found for whatever can be shown to work at reasonable cost.

How might the efficacy of employment creation for the reduction of the risk of conflict reversion be estimated? Both explanatory and dependent variables are difficult to observe. As to the explanatory variable, although the labour force data for post-conflict societies is pitiful, it should in principle be possible to generate crude estimates of youth employment from the pre-conflict employment structure of the economy and data on how the overall structure of the economy has changed as a result of conflict. Since there are likely to be large differences in employment opportunities between post-conflict societies, even crude estimates may be revealing. The readily observable dependent variable is the reversion to conflict. But given that any causal connection from employment opportunities to conflict is likely to run through recruitment to rebel forces, a superior dependent variable would be changes in rebel recruitment in one or more post-conflict (or even conflict) countries. It should sometimes be possible to infer changes in recruitment either from studies of the composition of a rebel army (e.g. at the point at which it is disbanded), or from military estimates of its size made at different times. These changes in size may be relatable, statistically, to observed or inferred changes in employment. A variant on the above may be to relate observed or inferred changes in recruitment to observed changes in the opportunity cost of labour. It is known that during the massive Russian civil war of 1919-21,

recruitment fell and desertion peaked during harvest time. In many conflict-prone societies such seasonal patterns of the opportunity cost of male labour (of different ages) are clear enough, or variations in rainfall could be used as in Miguel *et al.* (2004).

On balance, I think that the quantitative study of rebel recruitment offers more promising opportunities of convincing results than the macro-approach of observing employment and the reversion to civil war, but this does depend upon opportune fieldwork, e.g. during rebel demobilizations.

Generating jobs

One hypothesis on employment generation in post-conflict settings that is potentially testable is 'forgetting by not-doing': employment is limited because during conflict skills atrophy. This could be tested by using in-country variations in the intensity of conflict to study differences in firm-level employment generation. Besley and Mueller (2009) have used such in-country variation in conflict intensity to explain variations in house prices in Northern Ireland, and Miguel and Bellows (2009) have used variations in conflict intensity in Sierra Leone to explain variations in political participation. Collier and Duponchel (2010) have attempted to relate the Barlow and Miguel data on conflict variation to firm-level employment data. Unfortunately, the only employment data, from a survey by UNDP, contains only limited pertinent information. They find that controlling for other characteristics firms in conflict areas shed employment more rapidly during conflict, and in the post-conflict period have a higher demand for training. This suggests that conflict has destroyed skills. There is scope for a purpose-designed firm-based employment survey in a post-conflict society to utilize variations in conflict intensity to develop such ideas more thoroughly.

If skill shortage is a major constraint for firms, the policy implications are reasonably clear. At low levels of per capita income, investment in generic skills is well-understood to be problematic: firms are reluctant to finance it because of the returns accrue to employees, while employees face financing constraints. One option is to encourage the return of emigrants who have maintained and acquired skills while abroad. Another approach is to subsidize in-firm training. A third is to establish government-financed technical schools.

4. The Provision of Basic Services

In one dimension low-income societies cannot wait for 'state capability' to emerge. Basic services, such as education and health care, are grossly inadequate for 21st century conditions. The constraint upon enhanced service delivery is not necessarily financial: as the Public Expenditure Tracking Surveys of the World Bank have shown, often only a small fraction of the public money allocated for these services is actually spent on them.

The provision of basic services raises difficult issues concerning the performance of employees and how costs are financed. Although free public provision avoids charging users and so

potentially maximizes usage, if public employees have not internalized the goals of the organization, there are few means of providing them with incentives to perform. This is the typical problem of public sector provision in low-income societies. During the 1990s the approach favoured by the donors to address the problem of a dysfunctional public sector was to introduce standard market discipline through 'cost-recovery': users would purchase services. This approach has generally been found to be a mistake: the poorest households and not in a position to purchase services at levels appropriate for merit goods. However, policy has not yet shifted to the corollary of how, if services are not to be sold through the market, service-providing organizations are to be disciplined into being cost-effective. There are various ways of providing such a discipline.

One is conventional civil service reform, introducing performance targets and rewards. This is the standard approach but it has proved to be very difficult: poor performance may well be a locally stable equilibrium; the target-reward system is easy to game because individual performance is difficult to monitor, and incentives may further undermine intrinsic motivation. In nearly all the societies that currently lack adequate state capacity, this approach has been encouraged by donors for the past four decades. It is time to think of alternatives.

The 'radical' approach often favoured by economists is a voucher-type system for schooling and insurance for health care. There has been some research on this model, though not, I think, in the most difficult environments. An advantage of the approach is that it would enable provision to be private while finance would be public. However, while it may be the best solution in some contexts, it faces both political and administrative obstacles that make it infeasible in most countries.

An intermediate approach is that of Public Service Agencies (Bold, Collier and Zeitlin, 2009). The PSA channels public money (government and donor) to providing organizations, (NGOs, churches, local governments, firms etc.), while monitoring their performance. Hence, the assessment of organization performance is undertaken centrally rather than by users. Since the PSA is allocating resources, it can also set criteria such as standards, geographic coverage, and unit costs. Hence, the PSA provides the government with more direct control than a voucher/insurance system, but like that system does not require on-the-ground provision of services by the public sector itself.

There is a lot of research testing specific interventions that might improve the performance of public sector employees in particular contexts of developing countries, but little that evaluates alternative systems. The work of Akerlof and Kranton (2005) on employee motivation has not yet been much applied in the context of breakdown of public sector performance. What is needed here is not simply smart individual RCTs, but a larger research program in collaboration with a government that is interested in experimenting not just with minor innovations but with alternative systems. Such opportunities can only come about at times of structural change, such as early post-conflict years, new governments, or natural catastrophe, when governments face up

to the wide gulf between their aspirations and what can be achieved by the . Currently, Haiti and Southern Sudan may constitute such opportunities.

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