

---

# Thicker Diagnostic

**Intergration of political and economic  
theory and data for a different and better  
analysis of development challenges**

---

**Working Paper**

November 2019

---

**Authors**

Stevan Lee, Mark Henstridge,  
and Umar Salam

# **Thicker Diagnostics**

**Integration of political and economic theory and data for a  
different and better analysis of development challenges**

Working Paper

November 2019

Stevan Lee, Mark Henstridge, and Umar Salam

## About Oxford Policy Management

Oxford Policy Management is committed to helping low- and middle-income countries achieve growth and reduce poverty and disadvantage through public policy reform.

We seek to bring about lasting positive change using analytical and practical policy expertise. Through our global network of offices, we work in partnership with national decision makers to research, design, implement, and evaluate impactful public policy.

We work in all areas of social and economic policy and governance, including health, finance, education, climate change, and public sector management. We draw on our local and international sector experts to provide the very best evidence-based support.

Oxford Policy Management Limited  
Registered in England: 3122495

Level 3, Clarendon House  
52 Cornmarket Street  
Oxford, OX1 3HJ  
United Kingdom

Tel: +44 (0) 1865 207 300  
Fax: +44 (0) 1865 207 301  
Email: [admin@opml.co.uk](mailto:admin@opml.co.uk)  
Website: [www.opml.co.uk](http://www.opml.co.uk)  
Twitter: [@OPMglobal](https://twitter.com/OPMglobal)  
Facebook: [@OPMglobal](https://www.facebook.com/OPMglobal)  
YouTube: [@OPMglobal](https://www.youtube.com/OPMglobal)  
LinkedIn: [@OPMglobal](https://www.linkedin.com/company/OPMglobal)

---

---

## Acknowledgements

Part of this paper was presented and discussed at Oxford Policy Management on 7 November 2019, with a panel including François Bourguignon, Stefan Dercon, Sue Parnell, Lant Pritchett, and Kunal Sen. This generated very useful input. We extend our particular thanks also to François Bourguignon, Kunal Sen, and Liz Brower for more detailed comments on earlier drafts.

---

## Table of contents

Acknowledgements .....	i
Introduction and summary .....	1
Different attempts to build politics or institutions into economic analysis have many things in common, and the Thicker Diagnostic is an expression of this shared approach .....	3
There are tensions in combining political and economic analysis: can economics adapt to absorb the key features of a political settlement? .....	14
Secondary effects and market interactions are important in Growth Diagnostics but even more important when we attempt to fuse economic and political analyses. This has major implications for the use of evidence about 'what works' .....	15
There are key differences between the analysis produced by a Thicker Diagnostic compared to a seemingly apolitical Growth Diagnostic .....	16
References .....	18
Annex: How to do a Thicker Diagnostic .....	19
Example: India Thicker Diagnostic .....	21
Example: Nepal Thicker Diagnostic .....	27

## Introduction and summary

**The point of a Thicker Diagnostic is to integrate political, social, and economic evidence to understand the issues that are limiting progress in a country, and to inform policy and managerial choices that can lead to effective reform. The thicker approach has strong implications for prioritisation in the selection of policy options at macro and sector level and for the use of evidence taken from other settings.**

**At a macro level, development policy is about how to narrow the gap in the massive differences between countries, especially in terms of material, economic performance and human welfare.** At different times in history, the gaps between countries seem to be getting wider or narrower. In the 1980s, countries seemed to be diverging; by the 2000s, some convergence seemed to have set in. The gaps are still vast, with the United States 40–50 times richer, *per capita*, than poorer African countries like Malawi and Niger. Differences in natural endowments do not account for these huge gaps, especially in an age where capital and knowledge are so mobile. Therefore, the common understanding is that there is something different about the way economies are working or interacting with other economies that is, or has been, holding back the poorer countries. At a macro level, diagnostics are about pin-pointing these issues so solutions can be designed. A critical argument of this Working Paper is that finding effective solutions depends not only on the problems themselves but also on their causes – and that different solutions may be appropriate in different settings, even when the problems may seem similar.

**Like any diagnostic, Growth Diagnostics are a device for working out what action to take.** Growth Diagnostics (pioneered by Hausmann, Rodrik and Velasco (HRV)) involve finding the key binding constraints to growth so that policymakers are better informed about which areas to target. They are for countries, and the most important thing about them is that – by design – they are extremely country specific. Their focus is on allocative efficiency – *which important production costs are really out of line and impeding investment?* This is an extremely useful question to ask and succeeds in identifying different binding constraints in different countries. Mechanically implemented, without adaptation, ‘HRV’ Growth Diagnostics do not pay attention to the deeper causes of allocative inefficiencies. They also do not tell the policymaker *how* to enact change, only what the consequences might be for growth. The relative prioritisation of growth as a policy objective and the method to achieve it are for the policymaker to determine.

**The authors of Growth Diagnostics, and many other economists, are drawn to the idea that formal and informal institutions and the effects of political power are important in explaining the persistent differences within countries.** At one level, this is obvious: powerful actors set policy and make the rules. Government makes economic policies and laws. Different histories produce different political regimes, different policy mixes, and deep institutional features across different countries – this should have an impact on economic activity, including on incentives and investment. If these differences are significant and persistent over long periods, this could explain why economies are not more similar. Note, however, that causality is not straightforward – we know that well-performing economies are associated with strong institutions but we do not know if it was those institutions that led to the economies performing well, or if it was the other way around with strong institutions emerging out of economic success, or if it was a mixture of the two. The empirical evidence is mixed.

**Political analysis has a different focus and a different set of concepts from economics, and this makes them difficult to fit together – mostly the two types of analysis are conducted**

**by different people without much interaction.** Political analysis focuses on power. The economy is important, but it is understood as an instrument for actors engaged in acquiring, holding, and sharing power. By contrast, in economics, power – whether on the part of the state or particular groups – is needed to set policy to alter economic outcomes but there is often no attention paid to who runs the government, the range of its priorities, or the fact that the group in charge might change. Moreover, the enactment of policy may have only a weak relationship to how actual decisions are made: there is a huge difference between *de facto* and *de jure* power.

**Numerous attempts have been made to fuse political, institutional, and economic analyses and this Working Paper observes the strong commonalities across various approaches – especially the ones under consideration here.** On the economic side, producers and consumers respond to incentives, combine resources, and thus produce economic outcomes – different incentives lead to different outcomes. On the political side, powerful groups and individuals shape institutions and incentives to try and reproduce their power, and of course resources (income and wealth) can be used in many ways to help them hold on to power. The bridge between politics and economics that multiple authors use is institutions: power sets the institutions and these make the incentives that determine economic outcomes. Crucially, the economic outcomes feed back into politics.

**Of course, there are differences of view: are politics and institutions stable, or in continuous flux?** Economists/economic historians like Douglass North, Daron Acemoglu, and Jim Robinson are interested in the idea that institutions are used to reproduce power, that this makes them very persistent over time, and that this helps to explain why differences between countries can widen over time. Scholars who specialise in politics may see politics as much more turbulent: more like an endless process of gaming and bargaining, negotiation, and formation of alliances.

**There are tensions between political analysis and neoclassical economics that can seem irreconcilable, but this paper argues that economics is adaptable and can absorb concepts from political analysis.** A source of potential incompatibility is economics' tendency to treat producers, consumers, and even countries as homogenous, like a population of average firms, households, workers, and consumers, with the same abilities and tastes, outputs, and income, all subject to the same rules and incentives. This makes the maths underneath economic models possible to work out, but clearly this approach is problematic for political analysts who think about actors in different roles and of power being exerted by one actor or group over another.

**Some of the mathematical insights from economics can help us think through the synthesis of political and economic facts more clearly.** It would be too complicated to specify a model incorporating political, social institutional, policy, production, and outcome variables. But it is not necessary to specify that model to realise that, if it did exist, all those features would behave like endogenous variables in a system of equations. This means attempts to target one variable or issue will produce a reaction across other features – potentially *all* other features. And it means that the impact of an exogenous policy change or intervention will depend on the starting conditions across a wide range of features. For example, if a Growth Diagnostic shows that electricity is too expensive and an outside actor can bring down its cost, there will be secondary impacts in other markets. If politics, institutions, and policy are brought into the (notional) system of equations, then there would also be secondary effects through these features as well as in markets. Such an understanding corresponds closely to our intuitive grasp of how the world works.

**The issues discussed in this Working Paper show us why a Thicker Diagnostic, a heuristic (practical, non-mechanical) way of fusing political and economic analyses, produces a**

**different sort of result from a Growth Diagnostic and different insights than would be gained from reading economic and political analysis side by side.**

- The Thicker Diagnostic should incorporate existing analyses, and might be completed without any primary analysis at all.
- The Thicker Diagnostic can look at the causes of problems prioritised by a Growth Diagnostic, but also issues generated from other types of economic and sector analysis.
- The Thicker Diagnostic shows how country-specific features generate important problems and how problems relate to and reinforce each other, and it gives an idea of the sort of disruption that might have to occur for particular reforms, policy changes, or investments to have an impact.
- This analysis should allow a much better interpretation of impact evidence from other settings – a lot of it will not be relevant because country-specific features are highly variable and they make a lot of difference to the impact of an intervention.
- The analysis will be of use to external actors who not only want to identify ideal solutions but also to determine whether or not these are politically feasible. The Thicker Diagnostic can help to establish whether or not an intervention is politically feasible by examining whether the impact will be acceptable – even preferable – for powerful actors.
- Domestic actors know local politics better, but do not possess complete knowledge – therefore, the Thicker Diagnostic’s exploration of secondary effects and unintended consequences, perhaps expanded in some cases to a quantification of those effects, might be very useful to a decision maker needing to find a politically feasible (i.e. acceptably disruptive) set of interventions and reforms.

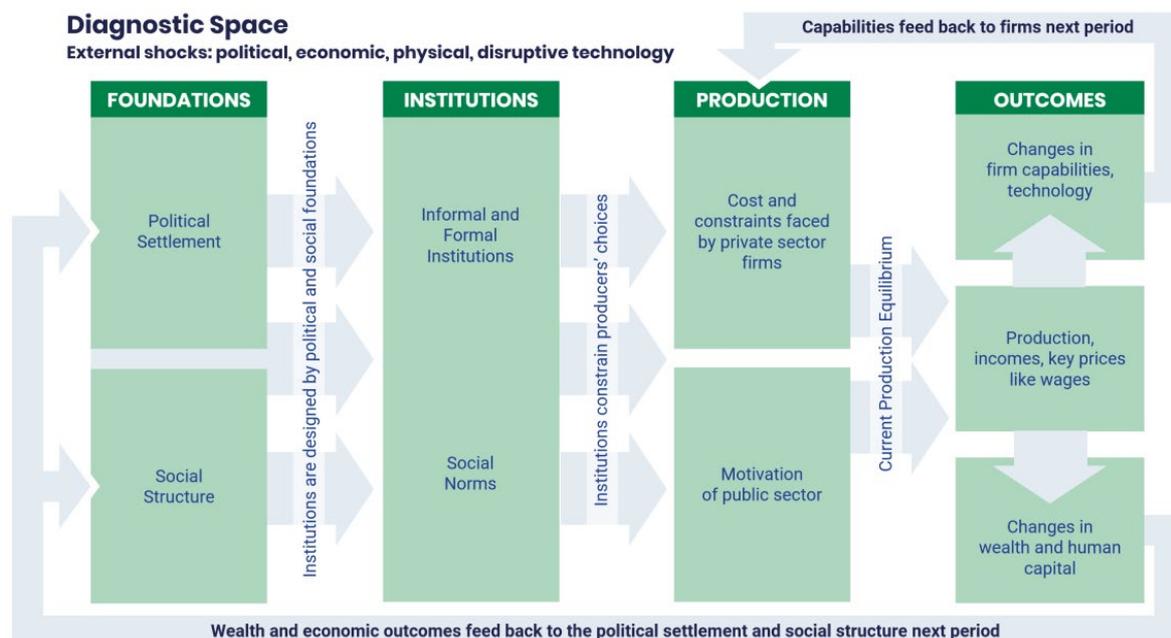
## **Different attempts to build politics or institutions into economic analysis have many things in common, and the Thicker Diagnostic is an expression of this shared approach**

**Growth Diagnostics are about spotting constraints to growth and they focus on problems with resource allocation, i.e. problems with incentives that inhibit investment. Political analysis is about power, including how powerful actors alter economic outcomes to hold on to power. There are numerous attempts to push each type of analysis into the territory of the other. The Diagnostic Space is a visual representation of the fusion of these two types of analysis, meeting in the middle at ‘institutions’. This approach is based on the commonalities between approaches but, of course, there are also differences between every approach, not least in the definition of ‘institutions’ (see Box 1).**

## **The Diagnostic Space and the purpose of the Thicker Diagnostic**

**The Diagnostic Space is a framework which comes out of key commonalities across diverse theoretical approaches.** Figure 1 illustrates the ‘Diagnostic Space’ – the array of features that characterise a particular country or ‘development system’ and the relationships between those features, the nature of which is strongly similar across a range of approaches. This becomes a framework for assembling evidence about those features and the causal relationships between the features. Crucially, every academic approach examined fits neatly into this space.

Figure 1



**The space has four columns that are groups of features of a similar type, with the immediate thread of causality generally moving from left to right.** On the right-hand side of the diagram is the standard economic analysis: there are producers and outcomes. The producers make some maximising decisions about investment, employment, and production, which lead to a short-run equilibrium and a distribution of income (and changes in assets and technological experience). On the left-hand side there is political analysis: the political settlement and social structure, whose powerful actors design institutions. The intersection of the economic (right side) and political-economic (left side) approaches is through institutions: institutions are rules and conventions that constrain producers' options and, while they are designed on the left-hand side, they have impact on the right.

**As well as the immediate thread of causality, there are feedback loops.** The immediate thread of causality is from left to right: politics produces institutions that constrain producers that alters outcomes. But feedback from right to left is a vital concept in the Diagnostic Space. Material outcomes can determine changes at political or institutional level, for example.

**An example of how the Thicker Diagnostic can move beyond the economics of allocative efficiency is the industrial progress 'feedback loop', represented at the top right of Figure 1.** This is not a feature of the basic neoclassical models but other economists often produce useful work on how industrial progress and innovation is working or being impeded (Sutton and Kellow 2011), and sometimes this will be a critical problem for growth. The Thicker Diagnostic is able to absorb this sort of evidence and it is important to do so because there is often a strong political economy to industrial progress and, indeed, institutions linked to protecting private interests and reproducing power can have similar (or even greater) effects to state-directed industrial policies. In this sort of analysis, production in a particular industry exposes firms to experience, and leads to the development of technological and other capabilities. This is incremental over time – although capabilities can also be lost, through lack of use or resources. So, the feedback loop goes from industrial outcomes back to producers. Like the other feedback loops in the diagnostic, this acts from one period to

another so that capabilities evolve along a particular pathway. If something is really bad for innovation, or if most firms are prevented from entering many industries, then industrial progress might be slowed as a consequence.

**Perhaps the most important feedback loop is from outcomes (including wealth and human development outcomes) back to political settlements and social structures.** Of course, from there this links to institutions and policy. These are the feedback loops that produce paths in political economy and mean that policy is endogenous. In Figure 1, current economic outcomes, like the income of different groups, feed back into social and political foundations. Assets and wealth are also included as likely determinants of political and social outcomes – this would include things like the price of land or the level of human development. Assets are often left out of the basic economic analysis but an understanding of asset level outcomes might be vital in terms of making a connection back to politics.

**The function of the Thicker Diagnostic is to arrange evidence from different types of analysis to complete a picture of the vital features, and their inter-relationships, in a particular setting.**

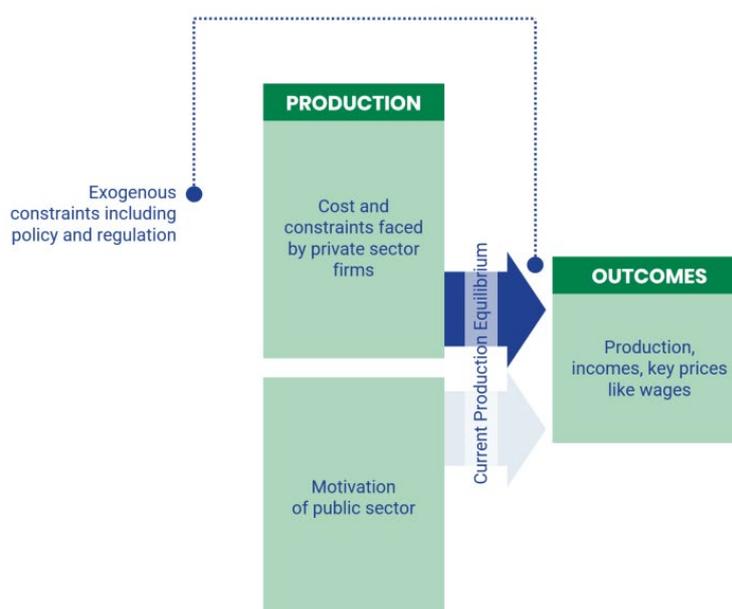
## **HRV and Growth Diagnostics – resource allocation and the second best**

**Growth Diagnostics (2005) is a seminal approach to ranking economic constraints in a particular country setting developed by Hausmann, Rodrik, and Velasco.** They set out an approach to diagnosing problems with the right side of the Diagnostic Space. Theoretically, HRV start with something like the Walrasian Competitive Equilibrium in mind and propose an approach to identify price distortions that point to major inefficiencies in resource allocation, which are impediments to investment and growth. In growth theory terms, this suggests that a poor country's macro-production function will be shifted down by significant allocative inefficiencies. Their approach is designed to be extremely pragmatic and oriented to policy and programming needs – their prime concern is not historical developments. Moreover, nor do they offer a complete design of policies or interventions; rather, the HRV diagnostic shows the policy goals that need to be achieved.

**Figure 2** HRV principally focus on distortions in resource allocation that arise from private sector producers making production decisions subject to exogenous constraints

### Diagnostic Space

Hausmann, Rodrik & Velasco



**In the Diagnostic Space, HRV are depicted in Figure 2 as being concerned with current investment, employment, and the production decisions of the private sector.** This emphasis is highlighted by the single deeply coloured arrow in the system relating production to outcomes. Production decisions, and prices, are affected by ‘constraints’ including policy and regulation, which are exogenous in this apolitical economic model. There is no ‘feedback’.

**HRV know politics matters, but it is outside their basic model.** While their theory is neoclassical and apolitical, in practice Growth Diagnostics as implemented by Hausmann *et al.* themselves did involve some attention to the deeper causes of the immediate problems identified. This is in contrast with some subsequent applications by, for example, MCC (2011).

**HRV include a discussion of secondary effects, which means that the removal of a major distortion works in different ways in different settings.** There is a very real possibility that, in a highly distorted market, correcting one distortion with beneficial direct effects on resource allocation could also have secondary effects that undermine those gains or even generate a net outcome that is worse – this follows from the Theory of the Second Best (Lipsey and Lancaster 1956). For example, suppose electricity is too expensive and the cost is brought down, but there is also a strong protective tariff that has already produced over-investment in uncompetitive production for the local market, and in fact these firms are the main consumers of electricity – by itself, cheaper electricity increases investment in this type of firm, which is actually a misallocation of resources. This is also a problem for HRV’s approach. They search for large and important market distortions but, sometimes, removing one of these could be counter-productive. So, it is vital to think about secondary effects when trying to improve efficiency. It is also interesting because it shows that, where country-specific conditions are different, the impact of similar interventions may also be different because of secondary effects.

**In HRV, policy comes from outside the model – you can have any policy you like.** In Figure 2, the left-hand side of the Diagnostic Space is left out. Any politics or institutions are formed outside the model and they are certainly not dependent on anything on the right-hand side of the Space. The processes that lead up to policy are left out of the reckoning, and this

means that, while any policy change or intervention produces secondary effects in the economy, these effects do not come back to policy itself.

### Box I: Academic approaches to ‘institutions’

From an academic perspective, the study of institutions has a long history and transcends several schools of economic thought, including both the ‘traditional’ Institutionalist school of Thorstein Veblen and John Commons and the New Institutional Economics (NIE) of Douglass North, Oliver Williamson, Daron Acemoglu and James Robinson, as well as heterodox approaches, such as those from evolutionary economics, Marxism, or the ‘institutional political economy’ of Mushtaq Khan or Ha-Joon Chang.

Veblen defined institutions as the ‘settled habits of thought common to the generality of men’ (Veblen 1909) but the most influential contemporary definition is that of North: ‘humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)’ (North 1991). Or, more simply, ‘the rules of the game’.

For North, the main reason for thinking about institutions at all is that we live in a world in which there are both transaction and transformation costs and in which information is not perfect and markets are not efficient. This means that neoclassical economics, which essentially offers a static description of the optimal allocation of resources, based on an idealised model of rationality and expectations, is ‘simply an inappropriate tool to analyse and prescribe policies that will induce development’ (North 1993). Specifically, it fails to describe the incentive structure of a non-frictionless world – a gap which is, for North, filled by the theory of institutions. However, NIE is an essentially positive critique of neoclassical economics, retaining the principle of scarcity and hence competition and the methodologically individualist microeconomics, but modifying the understanding of rationality and incorporating the idea of time.

With more heterodox approaches to institutions and political economy, the dynamics of institutional change tend to be at the centre of analysis. In the institutional political economy of Ha-Joon Chang, influenced by evolutionary economics, an explicit critique is made of the way that NIE explains the relationship between institutional change and development, and in particular the failure to consider the reverse causality, whereby ‘good’ institutions may emerge in response to, as opposed to drivers of, economic development (Chang 2006; 2011). Another form of critique is the ‘political settlement analysis’ of Mushtaq Khan, in which the question of power is critical (Khan 1995; 2004; 2010). For Khan, the reciprocal relationship between institutional configurations and the distribution of power is what constitutes the political settlement and drives change. It is through the exercise of power that particular groups seek to prevent or enforce the operations of institutions, or even to change those institutions themselves, while conversely it is through the operations of institutions that benefits and assets are distributed – the material basis of power. Like Chang, Khan emphasises how context-specific institutions are and he is, if anything, even more sceptical about the idea of a set of ‘good’ institutions that would inevitably lead to economic development.

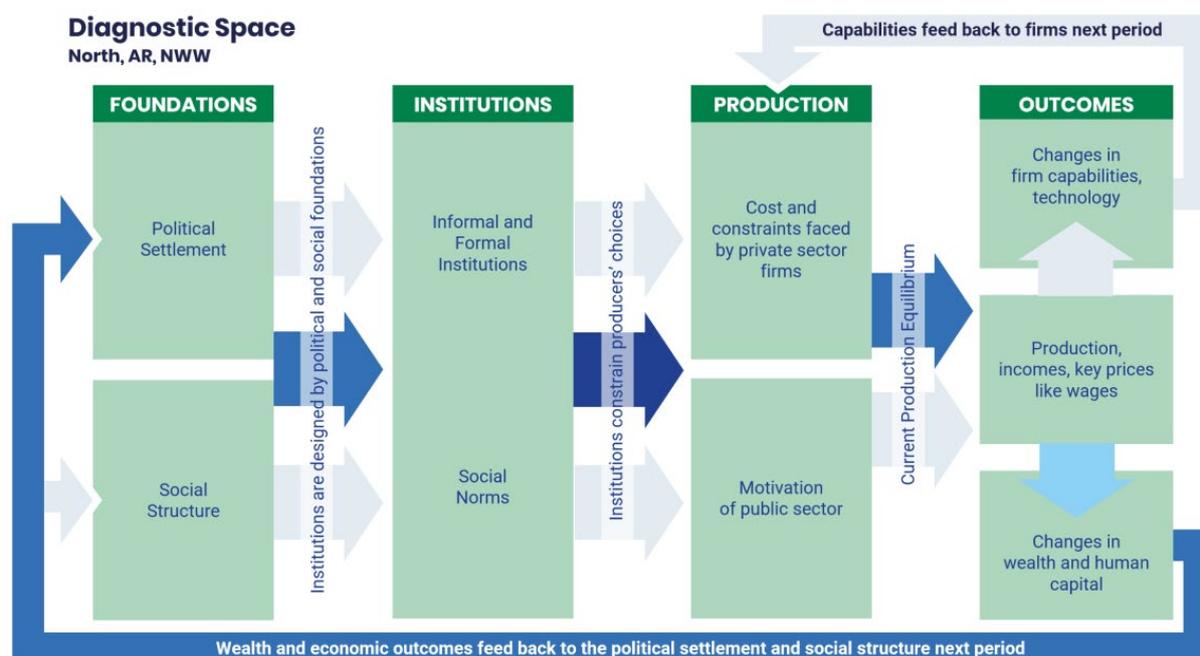
## Douglass North, NIE, and Acemoglu and Robinson

**Douglass North’s approach to institutions and economics in economic history, for which he won a Nobel Prize in 1993, is based on Ronald Coase’s concept of transaction costs (Coase 1937). North’s work led to what is now called ‘New Institutional Economics’.** In *Institutions, Institutional Change and Economic Performance* (North 1991), he describes how institutions are the deep, written or unwritten (formal or informal) rules that create the economic incentives which determine economic performance. Institutions are seen as solutions to the problem of exchange and they generate costs, some more than others. He discusses how these institutions may have political or social foundations, or indeed foundations in factor endowments (nature) that might generate deeply enduring institutions. The endurance of institutional differences between countries, rather than the convergence of institutions on a single set of normal or optimal institutions, is of great interest to North because it produces

path dependence and the possibility of divergence of economies based on institutional differences.

**North suggests historical, political, and social foundations for institutional features, but the institutions themselves produce costs in the economy and this is how they alter economic performance.** Institutions or ‘transaction costs’ are a lot like taxes or limits or other distortions in a Walrasian Competitive Equilibrium, which diminish allocative efficiency. This explains how they alter the productive potential of a country and could account for a wide gap in the economic development of one country compared to another with different institutional features.

**Figure 3** The New Institutional Economics focuses on how institutions, or ‘transaction costs’, alter the choices of private sector producers. These institutions arise in politics and the economic outcomes reinforce the political settlement, but there is little focus on how this reinforcement works



North is interested in the persistence of politics and therefore institutions but, for him, the impacts of the institutions are not experienced differentially by political groupings – so he makes rather limited use of actual political analysis. The institutions he looks at would often be characterised as asymmetric by others; for example, the King of Spain’s restrictions on South American trade. These rules included limiting trade to a very few ports, producing some very circuitous trade routes that imposed huge costs on traders. But these restrictions were not an erroneous design which produced a growth penalty by accident – they generated benefits for the King and the cronies who controlled and taxed trade out of these ports, and their access to these opportunities did not arise in a competitive market.

In the later work *Violence and Social Orders* (North, Wallis, and Weingast 2013), North explicitly addresses politics and also comes closer to a predictive diagnostic by describing a typology of political settlements that are either open or limited access. This implies there are two political groups: the elite and the rest. Consistent with earlier work, it is assumed that the ‘open-access order’ is going to deliver an optimal resource allocation and that if this arises in a developing country, we can expect rapid economic convergence with rich countries. The open-access orders use the threat of violence by the state to limit everyone

else's use of violence and to protect everyone's rights. This contrasts with the three limited-access orders where violence, or the threat of it, is used to convey stronger rights for elites in ways that distort and damage economic performance. Some 'orders' are clearly worse than others in terms of economic efficiency. One may give way to the next but there is nothing systematic about that – no theory of history. But the type of 'order' has clear economic implications, making this approach more predictive. For North, introducing three types of political settlement seems like adding detail, but it is also highly reductive – three specific types omits all the other types. In common with various other approaches, reducing the political settlement to a few types risks blunting the accuracy of any predictions that might be made.

**Acemoglu and Robinson (AR) have also made a seminal contribution to institutional economics, through a series of academic and popular articles, including their famous book *Why Nations Fail* (Robinson and Acemoglu 2012).** The chains of causality assumed by AR are extremely similar to those ascribed to North in Figure 3. Like North they use the framework to discuss historical episodes. Perhaps one of their main insights is that 'extractive' institutions are likely to reinforce the grip of one type of regime – a relatively small elite that penalises most of the population for its own benefit – whereas more 'inclusive' institutions (similar to North's 'open-access' institutions) are more likely to reinforce the grip of another type of regime – a more accountable regime that governs more in the public interest – similar to North, Wallis, and Weingast. So, like North they are interested in enduring institutional differences and divergent paths. Also like North they can attribute the root cause of these differences to something completely exogenous, like 'nature'. Once a self-reinforcing set of institutions and political settlement (or political and economic institutions) are established it might reproduce itself for a very long time – for several centuries, in fact – with no endogenous forces likely to disrupt the path. Something external may eventually disrupt it. however. As with North they look at 16th century Spain and its colonies compared to 16th century England and its colonies, as well as other examples.

**AR make us think about path dependence and, in a reductive way, they offer an analysis of political factors from which they extrapolate development outcomes.** One conclusion is that it is better for most people if institutions are more inclusive but not necessarily better for the groups in charge, which is why extractive institutions can be so persistent. Another implication is that institutions and policy have become endogenous. This explains the extreme persistence of institutional differences between countries in different dynamic equilibria or 'paths'. Can a country change its path? This would appear to require an external disruption – and even then, some external disruptions will be met by endogenous institutional and policy adjustments that restore a country to its path.

**Jean-Phillippe Platteau (2000) makes a useful extension of North into social norms.** These are social structures akin to political settlements but at a lower level. They produce institutions or 'social norms' that put powerful limits on the opportunities of some social actors, which can be seen as resource allocation distortions. These are included in Figure 3.

## **Pritchett, Sen, and Werker (PSW)**

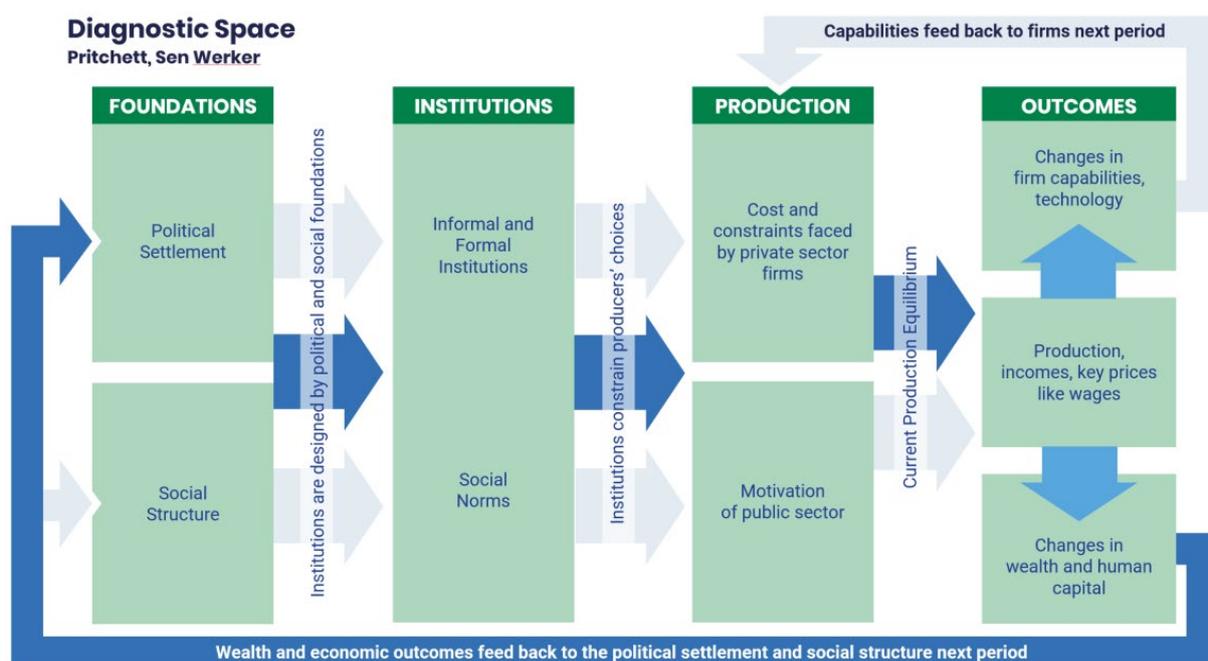
**In *Deals and Development* (Pritchett, Sen, and Werker 2017), PSW seek a 'unified growth theory' that uses a framework where the political settlement dictates institutions that generate economic outcomes – these are the familiar chains of causality from the Diagnostic Space.** PSW is represented in the Diagnostic Space in Figure 4.

**PSW use a framework with several elements that serves both to open up new dimensions and also reduce them to manageably small taxonomies.** PSW define four types of political settlement. PSW also suggest that a country's set of institutions can fit into one of four categories in the 'deals space', so there are multiple permutations of politics and deals space. Thirdly, they define four types of economic actors (in fact, types of producer), such that the goods and services they produce give them different access to rents in the 'rent space'. So, the type of political settlement and the position in the deals space generates rents across different industries in the rent space. As with AR this is reductive, if slightly less so.

**PSW retain some of the apolitical tendencies of North and the taxonomies are too general to be very predictive.** The type of political settlement does not predict the position in the deals space and a position in the deals space does not predict conditions in the rent space or economic outcomes. There are no political groupings and although a 'deals world' implies personalised contracts and rules of the game, the implications of asymmetric institutions are not discussed very systematically.

**However, the 'rents space' does move toward a more differentiated political economy analysis, compared with North, with institutions and policies working asymmetrically through (closed?) ownership of industries.** If political groups have different industrial interests, and perhaps ownership in some industries is protected or 'closed access', then institutions might shape 'rents' across these industries in a political way. In other words, industrially asymmetric institutions may also be politically asymmetric. The performance and protection of different industries may feed back into the political settlement because of this. (PSW do not discuss industrial capabilities, but if there are industrially asymmetrical institutions they would surely impact industrial development.) Where these features have been important, a researcher following the PSW framework is likely to pick up on them.

**Figure 4** PSW follow North but with more focus on the rapid interactions between power, institutions, and economic outcomes. They also allow for institutions to be differentiated across industries, so there are both political and industrial feedback loops.



**PSW also address the authors' preoccupation with episodic growth and, in so doing, provide interesting insights into how the features of different columns in the Diagnostic Space might interact sequentially.** Any shock, in the type of political settlement, the position in the deals space (institutions), or indeed an exogenous technological change, leads to follow-on impacts at all levels. PSW observe that institutions tend to move slowly whereas the growth rate is erratic and often episodic. Growth episodes as being triggered external shocks or as certain points are reached in the slow shift of institutions. Fast growth produces further political and institutional adjustments. This feedback happens fast enough to explain episodes of high growth. Where North and AR emphasise the endurance of institutional differences over centuries, PSW are more interested in the way perturbations in economic and political conditions may explain bursts of growth lasting a decade or so. Economic or political shocks and developments may trigger a rapid growth episode, which further alters political conditions and the deals environment, often in a way that destroys the conditions for growth, such that the episode of growth contains the seed of its own termination. An example is a shock that produces a somewhat more open and orderly deals space position for a country with closed-access institutions. This boosts investment and growth and may start to erode the political settlement. However, plus or minus a few members, the old elite is likely to re-assert itself, with endogenous institutions tending back toward more personal deals and asymmetric rules, and this ultimately slows down investment and growth again. In the rarer, more optimistic version, rapid growth produces a permanent political, institutional, and economic shift.

**PSW do not try to produce a predictive model but they do offer a framework for ordering information and ideas and, compared to North or AR, they allow for the two-way interaction between politics and economics that is messy and turbulent, rather than stable and enduring.**

## **Mushtaq Khan – political economy and development**

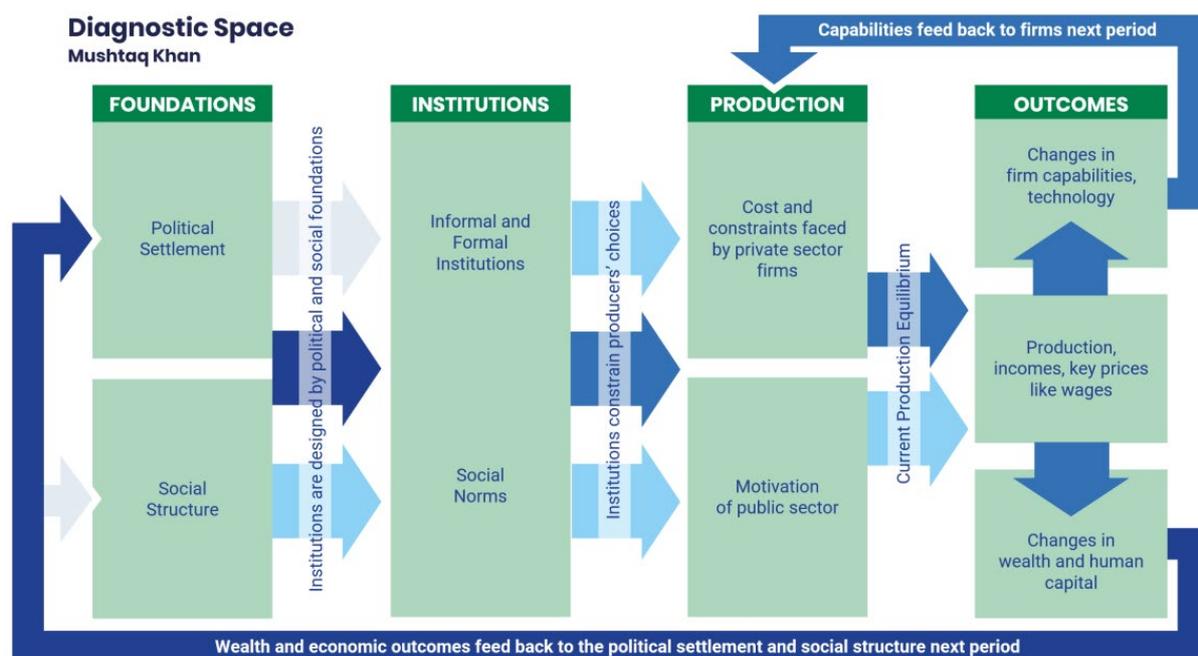
**Mushtaq Khan's approach belongs to political economy and his starting point is the left-hand side of the Diagnostic Space, with politics and power.** He is interested in how power is held and used in a country, how institutions, or the 'rules of the game', are organised to produce rents for the groups that are in power or whose support is required by the regime. He is also often interested in the current dynamics of the political settlement, and not so taken with the idea of massive inertia in politics that characterises the positions of North and NIE. Is the political economy producing prosperity and growth that is reinforcing the regime or undermining it? Is the political economy undermining investment and growth but nevertheless reproducing the grip of the regime? This is an approach laid out in *Rents, Rent-seeking and Economic Development* (Khan and Jomo 2000) and more recently Khan (2015).

**For Khan, the politics of the management of rents is absolutely critical to economic development.** For him, the optimality of Walrasian Competitive Equilibrium is almost irrelevant: development is not about removing rents but about the difference between the management of rents that build capabilities and investment and those that boost the asset values and holding power of elites but which also trap a country in an immiserising state. The crucial question is under what circumstances do the former (learning rents) become the latter (monopoly rents) and how this relates to the political economy.

**Power is used to change the rules and generate rents for groups that are close enough to power.** Rents arise in the economy, and there are various options for how they are generated. External events or endogenous dynamics might cause the position of different groups to alter and might also cause their grip on rents to alter, and of course rents have

direct and indirect impacts on the rest of the economy. The timescale for these changes is of a much higher frequency than that of AR – Khan’s model allows for constant flux in power and rents. Although rents arise in markets, they are generated for particular groups – something not clearly dealt with by North or AR, so Khan’s institutions can be thought of as discriminating or ‘asymmetric’ – applying differently to different groups. Khan’s rents result from the distribution of rights – different rights for different groups. Contrast North and AR’s tendency to see institutions as similar to classical economic constraints or transaction costs, which means they tend to assume that these rules apply equally to everyone.

**Figure 5** Khan puts far more emphasis on how complex politics produces institutions and rents for particular groups – the full economic impact of these rents is dealt with more vaguely



Khan’s approach can be clearly mapped onto the Development Space, as is shown in Figure 5. He is strong on the left-hand side of the diagram, and also strong on the feedback to politics and the connection of politics, rents, and industrial progress. Khan does not treat rents in the same way as HRV and makes no attempt to model or quantify them in the same way. However, he is interested in whether rents are being managed in a way that produces developmental or anti-developmental outcomes. In acknowledging that rents can be learning or Schumpeterian rents – generating new techniques or innovation – or they can be monopoly rents leading to a deadweight loss and the entrenchment of political power. This is the substance of his critique of Anne Krueger and neoclassical economics in general – that they always regard rents as a negative. Because of the way he links rents to industrial policy, the ‘firm capability’ feedback loop is coloured quite deeply in Figure 5.

## Bourguignon’s Economic Development and Institutions

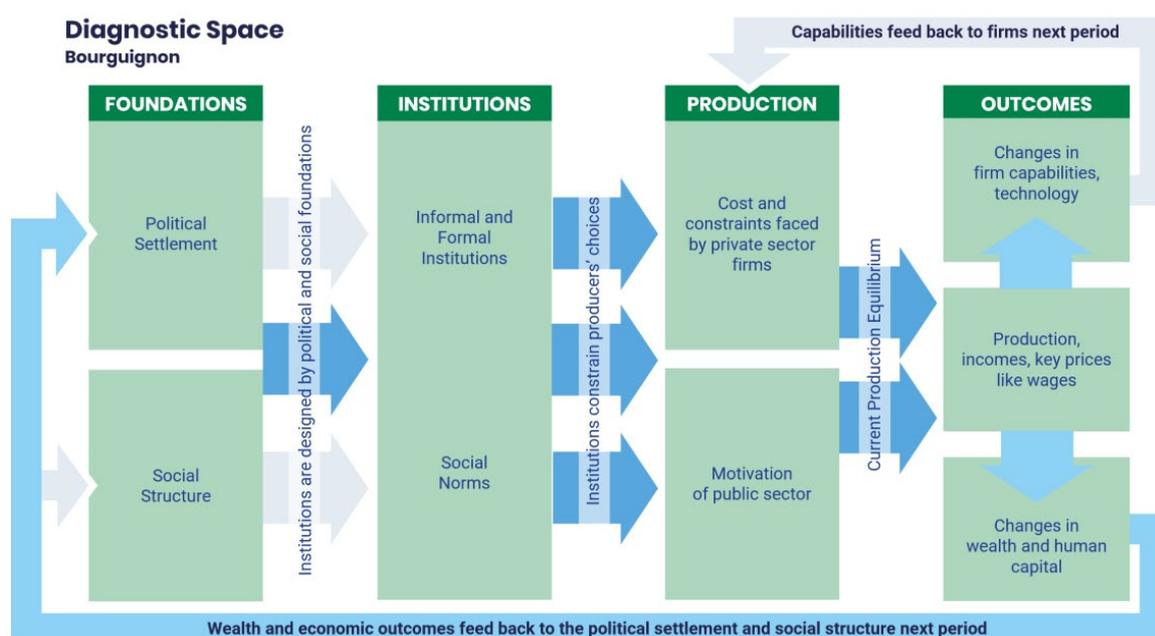
**Economic Development and Institutions (EDI)** is a UK Department for International Development-funded research project whose research directors are **François Bourguignon and Jean-Philippe Platteau**. The project scope extends to the far corners of the space described in Figure 6, with over 60 papers and an emergent EDI approach that is consistent with the North-like framework laid out above, although like other approaches, differs from or

deepens that approach in places and for the project as a whole, encompasses variations in approach.

**One research area in EDI is 'institutional diagnostics'.** The aim here is to extend HRV's 'Growth Diagnostic' to take account of the origins and importance of institutions. This is in development, and had only been applied in a preliminary way in Tanzania and then again in Benin as at October 2019.

**Like other approaches discussed, the EDI diagnostic in Tanzania goes some way to marrying political, institutional, and economic information.** It combines a Khan-esque political economy approach with a more traditional economic approach to development constraints. It gathers some of the information that Khan might gather to establish the political and social forces underpinning institutions but also gathers some more HRV-like information about the symptoms of economic development problems. These are brought together in thematic studies that are investigations of the causes of the symptoms identified, using chains of causality extremely similar to those in the Diagnostic Space.

**Figure 6** Bourguignon's EDI diagnostic traces the full length of causal chains from politics through institutions through public and private production decisions to outcomes. There is strong awareness of the feedback to politics but also a strong emphasis on the interactions of features across the four columns.



**Bourguignon is interested in general equilibrium in markets and the analogous interaction of institutions.** An important path-finding paper in EDI (Torvik 2016) explains how the interaction of institutions is fundamental. A change in one institution will alter others, and the impact of the change will certainly be conditional on the background state of other institutional features.

**Institutional diagnostics are about identifying key institutional weaknesses and their impacts, and they are not an alternative to HRV Growth Diagnostics.** HRV-type studies are made use of in the identification of constraints to economic growth and the institutional diagnostic does not repeat such a systematic exercise, although it does not confine itself to problems revealed by price distortions. At least in the preliminary studies, the emphasis is on describing the insidious nature of key economic problems in a way that indicates the

complexity of dealing with the institutional causes. Institutional weaknesses are identified but this does not carry an easy implication about the institutional reforms that are necessary.

## **There are tensions in combining political and economic analysis: can economics adapt to absorb the key features of a political settlement?**

**There are tensions in combining political and economic analysis because a lot of neoclassical economics is based on models wherein economic actors are essentially similar with similar rights and facing similar rules, and politics is about the interplay of groups and individuals who are different, with rights that are different and might change quite rapidly. But economics is adaptable. Focusing on growth theory, models where countries are homogenous predict that these countries should converge on a single level of income and productivity. If there is thought to be a particular phenomenon, perhaps caused by politics, which means that countries are divergent, the theory can be adapted to accommodate that, in different ways.**

**The basic Solow growth model assumes a high level of homogeneity across countries.** The foundational neoclassical growth model is Solow (1956). The model has many useful insights, including the idea that forcing savings and investment will not produce a sustainable impact. But for those interested in developing countries, an important result is that income *per capita* should converge, over time, in countries that share technology.

**It is possible to maintain a high degree of homogeneity and try to explain divergence between countries – this is what endogenous growth theory does.** Clearly, levels of income *per capita* and output per worker are very different across countries; indeed, for perhaps 200 years until the 1980s or 1990s, the gaps between countries were actually getting wider. One way of explaining divergence is to introduce an increasing returns story such as ‘technological development accelerates with capital intensity’ so that, while countries may share the all the same technology and economic rules, there can be multiple equilibria that produce convergence. Romer (1986) is the Nobel Prize-winning version of this thinking. Bourguignon (1981) produced a similar theory to explain divergence in individual incomes.

**A simpler way of modelling differences between countries is more supported by evidence, and perhaps more suitable if we believe there are significantly different institutional regimes across countries.** This is simply to say that, while modelled characteristics like technology may be homogenous, there may be other, exogenous characteristics that cause economies to behave differently. There is some empirical evidence in favour of this ‘conditional convergence’ (Barro 2012), with a lot of the exogenous characteristics bearing a close resemblance to the sorts of institutional and historic factors identified by North, Kahn, etc.

**Income distribution within countries became more equal in the period 1945–1980, but since then individual incomes have diverged and inequality has increased. Thomas Piketty spotted this but it is interesting that neoclassical economists including Stiglitz turned to Solow when reacting to this work, adapting it in quite a political way.** For example, Krugman (2014) thinks through Piketty using Solow. In a much more extensive response (four NBER papers), Stiglitz (2015) addresses Piketty, using Solow. He says that Solow focuses on savings and productive capital, but there are also rent-assets, wealth that derives from holdings of rent-bearing assets like land. He suggests that what has been happening since

about 1990 is that wealth has been driven up by gains in the prices of rent-assets while productive capital per worker has stagnated. Whereas in 1969 he shows that individual incomes should be convergent over time, because even the poor can save, in 2015 he argues that there are rent-assets that the poor do not hold. In effect, he is adapting neoclassical economics to accommodate asymmetric institutions, not to say Marxist institutions.

**What does this all mean for Thicker Diagnostics? It means that to properly take account of political analysis, we must allow for asymmetric institutions and for incentives and opportunities to be different across different groups within the same country.** In practice, this might mean one set of rules for a large, poorer group and perhaps several sets of negotiated and privileged rules for small groups and actors within the 'elite'. The most penetrating political analysis will distinguish not only between the elite and the rest but also between groups within the elite. Economics struggles to cope with a different set of rules for every individual but it can cope with more than one group, especially in the heuristic model employed in Thicker Diagnostics.

**Secondary effects and market interactions are important in Growth Diagnostics but even more important when we attempt to fuse economic and political analyses. This has major implications for the use of evidence about 'what works'.**

Fusing political analysis into a Growth Diagnostic turns out to be a lot about interactions. In economics, the Theory of the Second Best is limited to interactions between markets, and even this is troublesome enough to provoke substantial attention from HRV in their theoretical papers (Hausmann, Klinger, and Wagner 2008). In the Thicker Diagnostic, the aim is to fuse political and economic analysis and this entails endogenising policy and its origins where, in HRV, policy is outside the model. An implication we can take from economics is that the secondary effects of policy change will not be confined to markets but will extend to politics, institutions, and policy itself, once these things are endogenised. A related implication is that the impact of any exogenous policy change or intervention will be different depending on the background make-up of politics, institutions, and policy, as well as markets. In turn, this means that evidence generated in settings where background conditions are significantly different could be misleading in terms of predicting 'what works' in a new setting. These issues also alter the aims of policy design and what we mean by 'politically feasible'.

**HRV are alert to secondary effects in markets and a Thicker Diagnostic adds value by making us alert to interactions across politics and policy.** For a Growth Diagnostic that hinges on economic efficiency, general equilibrium effects and the Theory of the Second Best have some major implications. In fact, for the Thicker Diagnostic, there are linkages and interactions within and between layers of features (e.g. between prices, between institutions, between prices and institutions, etc.). So, the importance of the interactions does not fade in the Thicker Diagnostic.

**Bourguignon (2018), Torvik (2016), and colleagues show that altering one institutional feature changes the impact of other institutional reforms: the impact of institutional change is conditional on the starting point across all institutions, not just the institution to be changed.** The classic example is the Sovereign Wealth Fund for the safe keeping of assets derived from oil exploitation. In Norway, this works perfectly – but Norway has a particular set of background institutions. In Chad, a similar fund was put in place but, after a

few years, it created a quantity of raidable assets that may have been irresistible to the perpetrators of an attempted coup d'état – and was certainly irresistible to the President, who raided it to fund efforts to defeat that coup attempt.

**Endogenous institutions and policy has major implications for the use of evidence: a lot of evidence about 'what works' will not be useful if interactions and local conditions are important.** The point of a diagnostic is to identify problems so that an evidence-based approach can be taken that removes the problems. This discussion of interactions shows that transferring evidence from one setting to another is perilous, especially impact assessment evidence that focuses only on a few variables. A randomised controlled trial (RCT) of an intervention may show impact in a particular setting, and it should work by setting all 'background' conditions the same in the treatment and control groups of the trial, so as to focus only on the impact of the intervention. But if the impact of the intervention is altered by all the background conditions, there is an insuperable problem with the external validity of the result – it will only apply with certainty in settings where the background conditions are very similar. The intervention might also work in places where some background conditions are quite different, but the RCT will not tell us where, having controlled-out the mechanisms that produce impact in the study setting.

**Once it is clear that an action that has a lot of impact on outcomes will also generate secondary effects through politics and institutions, this changes what is meant by a 'politically feasible' action, and may re-cast the policy problem quite significantly.** Returning to Figure 1, a policy or change or intervention might succeed in incentivising public or private producers to change outcomes in the economy on the right-hand side of the diagram. But unless the outcome-level change is very small or the feedback to politics and social structures is very weak, then the outcome-level change will cause a disruption to the political settlement with knock-on interactions through institutions and policy too. If the intervention 'sticks' and has enduring impact, the politics and adjustments that had previously produced the conditions for the original outcome will have to have shifted at least in a small way. So 'politically feasible' will not mean impact without political disruption but, rather, impact with *acceptable* political disruption.

**The purpose of Thicker Diagnostics is to generate setting-specific analysis but a general finding that impact will require acceptable political disruption does not close down the potential for impactful interventions, it just alters the set of interventions that are likely to work.** If, like early North or AR, we characterise political settlements as very stable, then the only interventions and policy changes that are likely to stick are those that reinforce the political settlement and stabilise outcomes. However, if we understand the political settlement more like most political analysts, as one of turbulence and flux, then the possibilities open up for interventions and policy changes that create outcome-level impact and acceptable – not to say, deliberate – political disruption.

## **There are key differences between the analysis produced by a Thicker Diagnostic compared to a seemingly apolitical Growth Diagnostic**

**This Working Paper has set out a review of approaches that attempt to explain development and growth and begin to fuse politics and economic analysis.** At a very high level, there is some consistency between the very diverse approaches in terms of the broadest causal connections. Neoclassical economists often undertake apolitical analysis: the HRV Growth Diagnostic is an exercise in identifying allocative efficiency problems. There

are also other approaches to identifying constraints on investment and growth that bring in other factors, such as innovation and the capabilities of firms. In their analysis, these economists ignore politics, and make policy exogenous. But all would accept that, in reality, policy and institutions are set in a political way. Likewise, political experts do not generally attempt to analyse the economy in a way that rivals economists, but they do accept that power reproduces *via* the economy, at least partly.

**The Thicker Diagnostic is a way of arranging diverse analysis and the result is a thicker description of key development challenges and also of their causes embedded in political and social foundations.** As with any development diagnostic, the purpose is to describe problems that undermine the development of an economy or some part of that economy or the welfare of some group, help to rank the importance of those problems, and to indicate where evidence-based solutions should be found to address the problems. The analysis also allows an anticipation of the secondary effects of a policy change or an intervention and therefore an anticipation of the reaction of the system to different options. This may indicate an important set of issues that need to be tackled together. As with an HRV diagnostic, further research and analysis may be required to fine tune the choices between options.

**The Thicker Diagnostic will allow an anticipation of the reaction of the wider system to deliberate interventions and a consideration of the impact of a range of options, including combinations.** The Thicker Diagnostic can be used to identify some serious development problems and their causes and also to anticipate the impact of options for tackling those problems. For a given problem and proposed solution, the conclusion may be as follows:

- The candidate intervention or policy change will fail to disrupt the system and have no lasting impact, because the system will produce a combination of countervailing formal and informal institutional and policy changes that will neutralise the impact of the intervention.
- Alternatively, it may seem likely that the candidate intervention or policy change can be made to 'stick' and will disrupt the system, thus causing adjustments not just to the immediate targeted economic outcomes but also in political and social structures, institutions, and policies – these might be minor adjustments or, at least theoretically, could snowball into something with much wider impact.
- The Thicker Diagnostic analysis will show up potential blocking groups that might help neutralise an intervention – understanding these might indicate a set of complementary interventions that might help the central intervention or policy change to 'stick'.
- In special cases, the Thicker Diagnostic might allow a more accurate subsequent evaluation of the full impact of a set of interventions, which is *revealing* – i.e. the existing regime changes its calculus as a result of the new information such that the endogenous adjustment and policy change occurs, which of course sticks. In this case, the information is disruptive and no further external intervention is required.

Just as with the HRV Growth Diagnostic, the basic diagnostic exercise will not produce fine-tuned policy recommendations, but it will give a good indication of what the objectives of policies or interventions should be and of the design challenges that will need to be met.

## References

- Barro, R. (2012) 'Convergence and Modernization Revisited.' *NBER Working Paper Series* (18295).
- Bourguignon, F. (1981) 'Pareto Superiority of Unequalitarian Equilibria in Stiglitz's Model of Wealth Distribution.' *Econometrica*: 1469–75.
- Coase, R. (1937) 'The Nature of the Firm.' *Economica* 4(16): 386–405.
- Hausmann, R., Klinger, B., and Wagner, R. (2008) 'Doing Growth Diagnostics in Practice: A "mindbook".' *Center for International Development* (177).
- Khan, M. (2015) 'The Role of Industrial Policy: Lessons from Asia.' *New Perspectives on Industrial Policy for a Modern Britain*: 79–98.
- Khan, M. and Jomo, K.S. (2000) *Rents, Rent-Seeking and Economic Development*. Cambridge University Press.
- Krugman, P. 'Notes on Piketty (Wonkish).' *New York Times*.
- Lipsey, R. G. and Lancaster, K. (1956) 'The General Theory of Second Best.' *The Review of Economic Studies* 24(1): 11.
- MCC (2011) Tanzania Growth Diagnostic.
- North, D. (1991) *Institutions, Institutional Change and Economic Performance* (Political Economy of Institutions and Decisions). Cambridge University Press.
- North, D., Wallis, J.J., and Weingast, B. (2013) *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*. Cambridge University Press.
- Platteau, J.-P. (2000) *Institutions, Social Norms and Economic Development* (Fundamentals of Development Economics). Routledge.
- Pritchett, L., Sen, K., and Werker, E. (2017) *Deals and Development: The Political Dynamics of Growth Episodes*. Oxford University Press.
- Robinson, J. and Acemoglu, D. (2012) *Why Nations Fail*.
- Romer, P.M. (1986) 'Increasing Returns and Long Run Growth', *Journal of Political Economy* 94(5): 1002–37.
- Solow, R. (1956) 'A Contribution to the Theory of Economic Growth.' *QJE* 133(4).
- Stiglitz, J.E. (1969) 'Distribution of Income and Wealth Among Individuals.' *Econometrica*: 382–97.
- (2015) *New Theoretical Perspectives on the Distribution of Income and Wealth Among Individuals: Part I. The Wealth Residual*.
- Sutton, J. and Kellow, N. (2011) *An Enterprise Map of Ethiopia*.
- Torvik, R. (2016) 'Formal Institutions and Low-Income Countries: Positive and Normative Theory'. Norwegian University of Science and Technology August 2016.

## Annex: How to do a Thicker Diagnostic

This annex shows how a Thicker Diagnostic is performed. The process is intended to be undertaken at country level, although it should be possible to adapt the diagnostic to focus on particular issues and even a single sector like education, or a subdivision of a country like a region or a city. The exercises should be possible without major data generation or survey work, but rather by basing conclusions on a wide range of existing evidence. In countries that are particularly under-researched it would be possible to generate missing parts of the data. However, in this approach, there is no complete set of data that is required. Rather, new information can always usefully be added.

The key steps are:

- assemble information on right-hand features: producers, efficiency, and capabilities;
- assemble information on left-hand features: the social structure and strong social norms, the political settlement and important interests, rents, and limits that the political settlement relies upon;
- arrange these features in the Diagnostic Space and/or Diagnostic Space matrix;
- match right- and left-hand features through the intersection of institutions. Allow for institutions to have asymmetric impact on different industries or on different sets of producers associated with political groups, or social groups like ethnicities and gender;
- identify important, long chains of direct causality from left to right, and also consider important interactions within or reaching back left across columns that might be reinforcing feedbacks; and
- use the deeper understanding of the causes and persistence of problems for options appraisal and to frame further investigations.

The Thicker Diagnostic can make use of any or all of the information of the type generated in the approaches discussed and other diagnostic exercises like the World Bank Systematic Country Diagnostics.

### Right-hand information

Right-hand information is to be converted into features under the heading private or public producers and outcomes that derive from the production process or from the income and wealth generated by the production.

On producers, it would be good to use firm census or enterprise survey information, or similar, to characterise the population of firms, for example according to age, size, and broad industry. 'Left-hand' information may reveal that institutions and regulations treat firms in different industries, or possibly firms with different ownership, differently. If this is the case then it will be useful to describe private producers according to the groups of producers that are facing different 'rules of the game'. In most developing countries, there should at least be a distinction between formal and informal enterprises and this will very often match a distinction about size, e.g. large formal firms and informal micro-enterprises. In each setting there might be more relevant, local categorisations of producers.

Public producers, including parastatals but also public sector service delivery operations run by civil servants, also need to be categorised. As with firms, the amount of detail needed

might depend on 'left-hand' information about where some parts of the public sector are differently incentivised or captured compared to other parts.

The results of an HRV-type study examining imbalances and price distortions at macroeconomic level, in factor markets and in other markets, will be almost indispensable for the Thicker Diagnostic. These distortions occur somewhere in the space between the 'producer' and 'outcome' columns but have direct consequences in terms of levels of production and prices in the outcome column.

It could be left out but, ideally, the Thicker Diagnostic should make use of any information about the productivity and capability of producers and how this is explained. The 'outcome' pattern of production may generate capabilities that feed back into the production possibilities in the economy. This could include enterprise survey statistics about the size, structure, and age of firms and the amount of reported innovation and productivity growth across enterprises, or other available assessments of technological advancement, innovation, and spillovers. Information on the diversity of production and any ongoing transformation in the pattern of growth also helps with inferences about firm capability. If there is an Enterprise Map (e.g. Sutton and Kellow 2011) or similar and/or qualitative study on innovation (e.g. Voeten, Achjar, and Utari 2016), so much the better. If there are detailed studies of skills and the labour market, this is also advantageous.

'Outcomes' goes beyond production and income to include changes in assets and wealth. This could include savings and investments (or absence thereof) in productive capital. Information from national accounts may suffice unless there is an interesting feature that needs to be brought out – for example, is there a drastically different capital intensity in one group of firms compared to another? Human capital, resulting from public and private investment, should also be included and there is likely to be a wealth of reports on service delivery and progress with human capital (e.g. Public Expenditure Reviews, etc.). Furthermore, social norms are often relevant in the accumulation of human capital. It might also include changes in the prices of assets linked to their associated income potential, rather than simply capital generated from savings – these can be important determinants of wealth. For example, the price of urban land can be very policy sensitive, and it may be interesting to be aware of which political or social groups possess the urban land that is rising in price.

## **Left-hand information**

Left-hand information is also to be arranged across two columns under the headings 'Foundation' (political settlement and social structure) and 'Institutions'. What is needed is information about the key political groups or actors who have power, and also those who want it, how they hold that power, and what they do to hold onto it. Likewise, there should be information on key elements of the social structure, who has power at a social level, and how social norms reproduce that structure.

The results of a Khan-type study or another serious political settlements analysis that identifies political groups, the rents they require, and the measures they take/ institutions they create in order to achieve this. Failing such an integrated report, and even if there is one, information can be gathered from histories and political accounts to help form a good description of the political settlement: who are the major political actors? what are their interests? how is power balanced? what institutional features are created to maintain this settlement?

A review of critical social norms including gender-based norms, and their impacts, is also required. Authoritative reports on poverty, like World Bank poverty assessments, will often contain this sort of information. Moreover, there is often material specifically on gender-based constraints and norms.

More targeted topical modules or 'deep dives' require more detailed upstream information as well as more detailed technical and downstream information. In an example of a skills shortage constraining growth caused by underinvestment in human capital and bias against girls, the top-level upstream information might link underinvestment to some political cause and might link the bias against girls to gender norms about education and restricted labour market participation. A deeper dive to inform an actual reform programme would need deeper downstream information but also more detailed knowledge about how institutions impact the public sector within education and how gender norms specifically impact girls' access to education and the returns to human capital for women and girls.

## **External factors**

The impact of exogenous shocks is beyond the scope of the core diagnostic but the framework could be extended to think about such issues. Potentially, exogenous changes could have a major disruptive impact on the deterministic path set up by the layers of exogenous features in the Diagnostic Space. These could include technological change, large movements in international prices and/or trading conditions, natural phenomena like diseases or climate change, conflict, or changes in countries with an important relationship.

An important consideration is whether the country (/sector/city) is steady in its dynamic equilibrium or whether it is already adjusting to major external shocks at the time of study. For example, conflict or post-conflict countries, or countries with a recent change of regime, may be adjusting to a new political settlement and therefore in flux. This is important to know and, if it is true, it would be advantageous to try and understand the main direction of that adjustment.

## **Synthesis and analysis**

Synthesis and analysis involves a matching of upstream and downstream evidence to generate preliminary 'long chains' of effects. Then, consideration of interactions to spot critical reinforcing endogeneities and to refine the long chains. Finally, using these refined long chains it should be possible to assess policy options, and packages of policy options may be implied.

This may best be illustrated by two real-world examples: 1) a Thicker Diagnostic of India, biased strongly toward human development issues; and 2) a Thicker Diagnostic of Nepal, which was undertaken very rapidly using secondary sources only.

## **Example: India Thicker Diagnostic**

To illustrate the synthesis and analysis process, a highly stylised and simplified version of an India diagnostic is used. This is a summary of a much larger report prepared in early 2019.

## Right-hand information

In terms of market distortions, reviewed material shows that India's economy is strongly dual, with pronounced differences between the formal and informal sectors. The formal sector has a small number of large, old, highly capitalised firms and few younger, smaller firms. There is a huge tale of tiny informal firms with much less capital and labour productivity. Across the literature, the 'missing middle' is linked to a closed-access business environment where regulation is enforced in an asymmetric way to generate barriers to entry.

In terms of capabilities, the missing middle is important in that it deprives India of a channel for innovation and the accumulation of firm capability. In addition, it is clear that India has much worse human development indicators than its income status would predict. This is partly due to very low levels of public subsidy in education and, especially, health.

## Left-hand information

In very crude and reduced terms, the literature on India's political economy reveals an historic 'elite bargain', which protects the interests of elite actors connected to power. This creates protectionism and other market-distorting institutions.

The elite bargain makes politics a high-stakes game, and democratic elections mean that it is worth elites engaging in a transactional or 'clientelist' politics to gain power. This creates a strong bias in favour of the public sector distributing private goods, rather than public goods.

Another striking feature of India's political and social foundations is very strongly disempowered groups as a result of strong social norms. This causes household-level discrimination against women and girls, including over education and nutrition. It also generates discrimination in service delivery, including for women and lower castes and tribes. Finally, it involves widespread labour market discrimination, effectively restricting the participation of large groups from whole areas of the job market.

## Matching and interactions

This part of the process can make use of the Diagnostic Space Matrix (DSM). This is a way of organising key features of the system under diagnosis and for recording investigations about short causal connections in that system. Each feature is included as a determinant (row) and a dependent (column), and features are grouped together. North-east of the long diagonal are impacts of left-hand features on features to their right, in the Diagnostic Space. South-west of that diagonal are 'feedback' impacts of right-hand features back into features on their left.

Key features identified in right- and left-hand information are inserted into the DSM. These include elite groups and highly disempowered groups, sets of institutions that enforce the elite bargain/protection of elite businesses, sets of institutions that constitute election-winning clientelism, and social norms discriminating against women, girls, and lower castes and tribes. The 'missing middle' is visible under producers as two groups of firms – large, elite-owned formal firms and informal micro-enterprises. Finally, key outcomes are included.

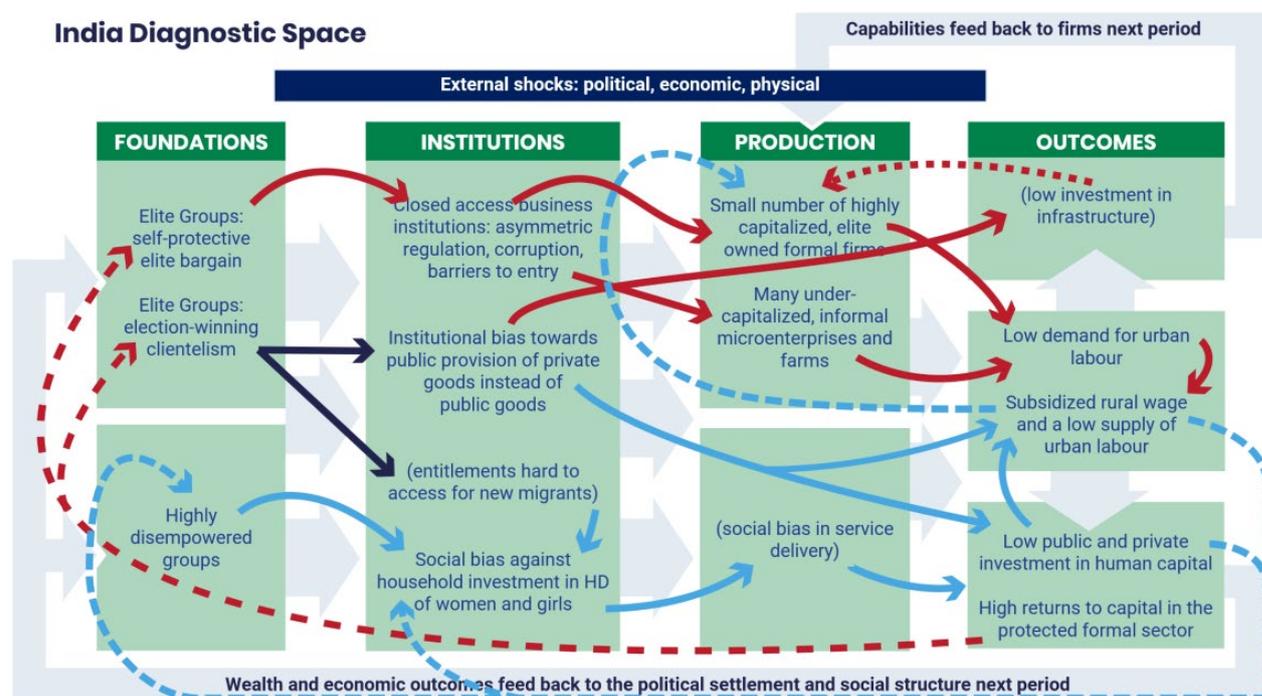
The DSM is used to explore long chains of causality and reinforcing feedbacks through the Diagnostic Space. If a feature in a row is a determinant of another feature in a column, an arrow () is placed in the corresponding cell. Above the diagonal (top left to bottom right), an arrow shows a relatively simple linear link between a more upstream and a more downstream feature. Below the diagonal, arrows show more complex endogeneities. At the bottom left is the 'feedback' loop, from outcomes back to political and social foundations.

INDIA THICKER DIAGNOSTIC DIAGNOSTIC SPACE MATRIX		Elite groups: self-protective elite bargain	Elite groups: election-winning clientelism	Highly disempowered groups	Closed-access business institutions: asymmetric regulation, corruption, barriers to entry	Institutional bias toward public provision of private goods instead of public goods	Social bias against investment in the human development of women and girls	Small number of highly capitalised, elite-owned formal firms	Many under-capitalised, informal micro-enterprises and farms	Low public and private investment in human capital	Low demand for urban labour	Subsidised rural wage and a low supply of urban labour	High returns to capital in the protected formal sector
		POLITICAL SETTLEMENT AND SOCIAL STRUCTURE		Elite groups: self-protective elite bargain	Elite groups: election-winning clientelism	Highly disempowered groups	Closed-access business institutions: asymmetric regulation, corruption, barriers to entry	Institutional bias toward public provision of private goods instead of public goods	Social bias against investment in the human development of women and girls	Small number of highly capitalised, elite-owned formal firms	Many under-capitalised, informal micro-enterprises and farms	Low public and private investment in human capital	Low demand for urban labour
INSTITUTIONS AND SOCIAL NORMS		Elite groups: self-protective elite bargain	Elite groups: election-winning clientelism	Highly disempowered groups	Closed-access business institutions: asymmetric regulation, corruption, barriers to entry	Institutional bias toward public provision of private goods instead of public goods	Social bias against investment in the human development of women and girls	Small number of highly capitalised, elite-owned formal firms	Many under-capitalised, informal micro-enterprises and farms	Low public and private investment in human capital	Low demand for urban labour	Subsidised rural wage and a low supply of urban labour	High returns to capital in the protected formal sector
PRODUCERS		Elite groups: self-protective elite bargain	Elite groups: election-winning clientelism	Highly disempowered groups	Closed-access business institutions: asymmetric regulation, corruption, barriers to entry	Institutional bias toward public provision of private goods instead of public goods	Social bias against investment in the human development of women and girls	Small number of highly capitalised, elite-owned formal firms	Many under-capitalised, informal micro-enterprises and farms	Low public and private investment in human capital	Low demand for urban labour	Subsidised rural wage and a low supply of urban labour	High returns to capital in the protected formal sector
OUTCOMES		Elite groups: self-protective elite bargain	Elite groups: election-winning clientelism	Highly disempowered groups	Closed-access business institutions: asymmetric regulation, corruption, barriers to entry	Institutional bias toward public provision of private goods instead of public goods	Social bias against investment in the human development of women and girls	Small number of highly capitalised, elite-owned formal firms	Many under-capitalised, informal micro-enterprises and farms	Low public and private investment in human capital	Low demand for urban labour	Subsidised rural wage and a low supply of urban labour	High returns to capital in the protected formal sector

In the DSM and the Diagnostic Space, pink arrows show how the elite bargain produces the closed-access business environment (matching), which in turn produces the 'missing middle', or lack of small and medium sized, young formal sector firms. This undermines both economic efficiency and firm-level capability development. An important inefficiency is that it suppresses urban or 'modern sector' labour demand. This is a long chain of effects.

The blue arrows show a different long chain, from social disempowerment to low investment in human capital/human development. This is reinforced by low public investment in human development (which is part of the other long chain). There are important reinforcing endogeneities in the second long chain, which show up as blue arrows below the diagonal. Social discrimination in service delivery, and also in the labour market, reinforces household-level bias (and social norms). This reinforcing endogeneity causes the long chain to be labelled a 'trap' – the 'low human capital rural trap'.

It should be noted that clientelism feeds both these long chains. Underinvestment in infrastructure and skills reinforces the 'missing middle' and underinvestment in human development, and entitlement programmes focused on rural areas, reinforce the 'low human capital rural trap'.



## Policy choices

This very compressed version of a thicker Indian diagnostic suggests that policy should address the missing middle and low levels of human development. But the diagnostic does not need to be thicker in order to highlight these issues – these are just the important downstream problems for economic efficiency and capability.

However, the stylised knowledge about the long chains results from the thickness of the diagnostic and these have strong pointers to policy.

On the missing middle – this appears to result from deep political bias against competition in order to generate easy rents for some groups with a lot of political influence. This suggests that a whole battery of technical fixes like business training or better finance for MSMEs might not make much difference because the barriers to entry are quite purposeful and institutions are likely to adapt to preserve those barriers should technical measures like training and credit start to weaken them.

A problem with deep political and institutional roots is hard to solve with any technical fix. A first port of call for policymakers facing such a problem would be to look at evidence of ‘what works’ in similar settings – other places where powerful private interests have created a distorted business environment. A possible alternative course of action could be to persuade the historic beneficiaries of the bias against competition that parts of the ‘missing middle’ are no longer to their advantage – for example, the cost of intermediate supplies and services are raised by the absence of organised and efficient smaller firms. In the modern world, it is not efficient for large companies to internalise every part of the value chain. If the problem is politically rooted, perhaps a politically rooted solution could be brokered by suggesting that special efforts should be made to improve the business environment for new entrants in intermediate goods and services. (Such a policy would need a lot more work but the diagnostic points in this direction.) The diagnostic, at a minimum, re-frames the discussion about the missing middle.

On the low human capital trap, a ‘thin’ diagnostic might point to greater public investment in health and education services. The Thicker Diagnostic conveys the historic failure to do this and its deeper institutional and political underpinnings: thus, increased funding might be hard to generate. It also draws attention to layers of reinforcement caused by very slow-to-change social norms: thus, increased funding for public services might not actually break through the low human capital trap in any case because there would still be social bias against investing in women and girls and against providing proper services to low-status groups.

Once again, the first port of call in a search for solutions should be a sift of evidence for what works in similar conditions. It is possible that the low human capital rural trap is more specific to India than the type of missing middle found in India and elsewhere. Some policies that suggest themselves include:

- Education, nutrition, and health services targeted solely at disempowered groups, possibly with additional rewards for enrolment in these services.
- Service delivery through the private sector financed from direct subsidies to disempowered users – to empower those users in the face of service delivery discrimination.
- Simultaneous action to open labour markets: quotas and subsidies might be justified in order to break down social norms and household attitudes.

These sorts of policy require strong political backing. This is not an impossibility in India because disempowered groups are very large and have a long history of using democracy to claim rights. Also, if the low human capital rural trap is seriously undermining future growth prospects it is not in elite interests that it remains. There

have been elite–poor alliances in India before, but they have tended to revolve around the distribution of private goods and subsidies instead of human capital. Policy advisers doing diagnostics cannot make these political changes or deals but they could highlight winners and losers from different reform options. The diagnostic can certainly frame further analysis of these options.

### **Example: Nepal Thicker Diagnostic**

This example was prepared very rapidly, in a couple of days, and therefore it represents distinctly preliminary findings – the previous example benefitted from fieldwork and sense-checking interviews. This rapid study of Nepal was made possible by excellent right- and left-hand information from the following secondary sources:

- *Asia Foundation 2017, Political Economy Analysis of Local Governance in Nepal;*
- *Asia Foundation 2014, Political Economy Analysis of Electricity Tariff Restructuring in Nepal;*
- *Magnus Hatlebakk for Norwegian Ministry of Foreign Affairs 2017, Nepal, a political economy analysis;*
- *MCC 2014, Nepal Growth Diagnostic;*
- *ODI for DFID 2014, Structural economic transformation in Nepal, A diagnostic study submitted to DFID Nepal;*
- *Roy and Kahn 2017, Nepal’s Political Settlement and Inclusive Growth: Not Quite Business as Usual;*
- *World Bank 2018, Systematic Country Diagnostic.*

### **Right-hand information**

Several Growth Diagnostics identified major excessive costs that were causing the misallocation of resources in Nepal.

The supply of electricity is inadequate to meet demand, creating a major distortion. There are IPPs but further private investment is deterred by pricing policy. Public investment has not supported expansion by the National Electricity Authority (NEA) and the NEA has not found a stable way to promote private investment – there are disputes with the price regulator ETFC, which in the past has suspected NEA of inefficiencies and corruption. MCC, ODI, and the World Bank all see this is an important economic constraint, and the World Bank sees it is a missed industrial opportunity, because Nepal has so much hydro potential and could be exporting.

Transport costs are high and customs arrangements are difficult. This is partly because of a bureaucracy that has failed to prioritise road investment for a long time (probably due to public procurement leakages). A second cause of high transport costs are that regulators permit anti-competitive arrangements in productive sectors, notably around trade and trucking. The existence of trucking syndicates feeds into transport costs. The existence of organised trading (smuggling) syndicates is one reason why customs are made so difficult for outsiders to navigate.

The 'business environment' is difficult for most potential businesses, so there is a small, uncompetitive formal sector with sluggish growth and low capabilities. In addition, 96% of workers are in the informal sector, which has grown, in terms of services, but where labour productivity is very low.

In regard to outcomes, these significant costs for business hold back investment and formal sector employment. Low labour demand reduces the returns to investment in human capital, where public investment is also low. The result is mass migration of unskilled workers and, by 2016, remittances that are worth 30% of GDP.

A non-standard issue in Nepal is the impact of migration and remittances. This is a consequence of sluggish growth and low labour demand (1.). A positive impact of it is that it largely explains why Nepal has made great progress in poverty reduction in the last decade despite sluggish *per capita* growth by low-income country and regional standards. Remittances have swollen to 30% of GDP and are quite evenly spread across households in different parts of the income spectrum: they support consumption in poor households and of course also support demand for non-tradeables and imports across the economy.

Where foreign exchange earnings support demand for non-tradeable goods, the exchange rate always strengthens. Khan sees this as a rent, and some insider groups do benefit from it, but it can also be seen as a side effect of very high remittance income. In other words, it is like the Dutch Disease created by migrants instead of oil.

A high level of remittances allows a large trade deficit and the capacity to import can only have reinforced some elite groups' interest in syndicated trading/smuggling operations. Remittances make imports cheap, but rent-extracting importers reduce the advantage of this for businesses and consumers alike.

## **Left-hand information**

Like India, Nepal has deep regional, ethnic, and caste-related inequalities, some of which are entrenched by social norms. Combined with closed-access politics for many years this produces very unequal service delivery across regions and groups and very unequal human development outcomes: basic school completion is generally quite low by international standards but for Dalits, for example, it is about 5%, which is extremely low.

There is also a closed-access political system that generates patronage and corruption in the bureaucracy. In Nepal, reports are of ubiquitous promotion of private/political interests by parts of the bureaucracy, but in quite an uncoordinated way, in small/individual deals.

A key feature of Nepal is that the closed-access political settlement is not stable; indeed, it has been thoroughly undermined by civil war and more than 10 years of negotiated peace in which politics has become much wider access. The new political settlement is not yet stable either, but many sources agree that the way it stabilises will be fundamental to future development prospects. There is a lot of focus on how devolution works out. Mushtaq Khan suggests that if the provincial level is given a lot of power and resources, this could easily tip into identity-based provincial politics with clientelism to distract/divert the wider political appetites, along with unstable national

coalitions unable to improve conditions for growth very much. Alternatively, if a more stable national coalition (CP–UML–??) emerges and pushes more power and discretion to a lower level of local government, perhaps quite a stable, developmental shift can occur, accommodating the wider participation in politics.

In reality, we seem to be seeing a mixture of these types of devolution, which means the final outcome is still uncertain. Nepal may not be steady in its dynamic equilibrium, and this is an important consideration in all policy choices.

## Matching and interactions

Key features have been arranged in a DSM below. The interactions are also displayed as arrows in the Diagnostic Space below that.

A lot of the solid red arrows represent a rather familiar phenomenon in developing countries: a closed-access political system that generates patronage and corruption in the bureaucracy. As touched on above, in Nepal reports are that private/political interests are promoted by parts of the bureaucracy in quite an uncoordinated way, in small/individual deals. Gold arrows relating to anti-competitive rents in the trucking and trade sectors reinforce high transport costs and the limited scale of the formal sector. The dotted 'feedback' arrows show that the high level of migration and remittances reinforces the lucrateness of the trucking and trade (smuggling) businesses by boosting demand for imports, and also strengthens the exchange rate, thus further undermining the competitiveness of formal sector, export-oriented businesses.

The blue arrows show that the new political settlement has the potential to be disruptive to some of the deeper causes of infrastructure problems and the poor, anti-competitive business environment, as well as service delivery problems. This is uncertain.

## Policy choices

There was no policy work undertaken connected to this rapid diagnostic but a number of clear issues do suggest themselves as a result of the analysis.

Attempts to tackle transport costs by investing in roads or border posts are likely to be blocked or will yield returns to the wrong actors if nothing is done to prevent the transport and import/export industries being run as rent-generating, closed-access businesses. The best technical solution in transport and trade might be to break up syndicates and to reduce trade protection. However, this would generate losses for powerful actors so would likely be blocked without some serious compensatory measures.

There should be a lot of caution about trying to prevent migration, since it is responsible for the poverty reduction seen in recent years. The incentives for migration would diminish if there was employment in alternative industries, but these alternative industries will not be much helped by forcing more unskilled labour back into the Nepali labour market.

The rents from transport and trade have squeezed trade and competitiveness and helped to create the migration-for-work pattern in Nepal – these phenomena reinforce each other.

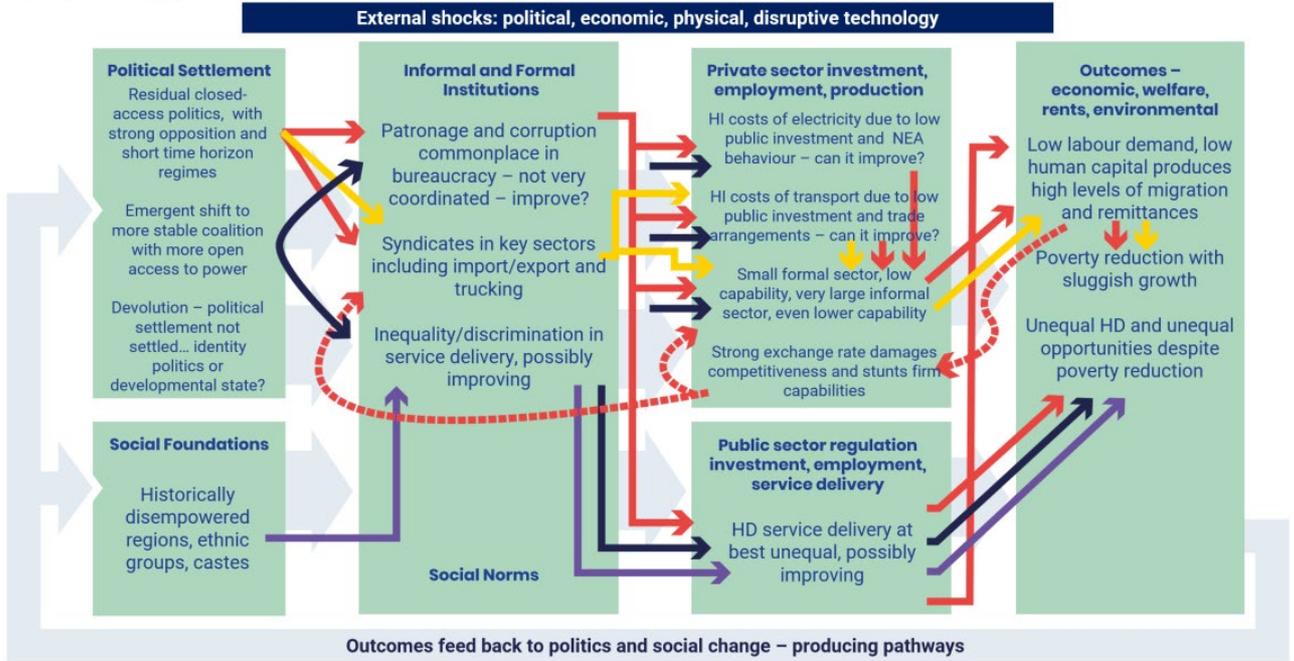
It is conspicuous in some of the literature that Nepal has massive untapped natural rent in the form of hydroelectric power potential and virtually unlimited market access in India – there is an impasse on mobilising investment resources to exploit this, although further discussion with experts reveal that the impasse may be linked to coalmining interests in India as much as any internal Nepali factors. The hydro sector could generate rents that do not damage economic performance and these could be used to make sure losers from power sector reforms are compensated. They may even allow for the compensation of losers from other sets of reforms. If opening India's market to clean energy imports from Nepal is what is necessary, this seems like a great project for international actors.

It is spotted already but the decentralisation process in Nepal is a playing out of the new political settlement and could have impact on a lot of issues. One option is to decentralise the power to generate rents in the economy, and damage economic performance, as is being done now. Another option is to re-build support for the political settlement that is less reliant on these rents – however, if there are powerful losers, something might need to be done to compensate them.

Nepal rapid/thick diagnostic		DEPENDENTS																					
		Residual closed-access politics, with strong opposition and short time-horizon regimes	Emergent shift to more stable coalition with more open access to power	Devolution – political settlement not settled	Historically disempowered regions, ethnic groups, castes	Patronage and corruption commonplace in bureaucracy – not very coordinated	Syndicates in key sectors including imports/exports and trucking	Inequality/discrimination in service delivery, possibly improving	Small formal sector, low capability investment and NEA behaviour	Very large informal sector, even lower capability and trade arrangements	Human development service delivery at best unequal, possibly improving informal sector, even	High costs of electricity due to low public investment and NEA behaviour – can it improve?	High costs of transport due to low public investment and trade arrangements – can it improve?	Strong exchange rate damages competitiveness and stunts firm capabilities	Low labour demand, low human capital produces high levels of migration and remittances	Poverty reduction with sluggish growth	Unequal human development and unequal opportunities despite poverty reduction						
DETERMINANTS	POLITICAL AND SOCIAL SETTLEMENT	Residual closed-access politics, with strong opposition and short time-horizon regimes					↗	↗	↗														
		Emergent shift to more stable coalition with more open access to power					↗		↗														
		Devolution – political settlement not settled... identity politics or developmental state?					↗		↗														
		Historically disempowered regions, ethnic groups, castes							↗														
	INSTITUTIONS	Patronage and corruption commonplace in bureaucracy – not very coordinated – improve?								↗		↗	↗	↗									
		Syndicates in key sectors including imports/exports and trucking								↗			↗										
		Inequality/discrimination in service delivery, possibly improving										↗	↗										
	PRODUCERS	Small formal sector, low capability														↗	↗						
		Very large informal sector, even lower capability														↗	↗						
		Human development service delivery at best unequal, possibly improving														↗	↗	↗					
	OUTCOMES	High costs of electricity due to low public investment and NEA behaviour – can it improve?									↗	↗											
		High costs of transport due to low public investment and trade arrangements – can it improve?									↗	↗											
		Strong exchange rate damages competitiveness and stunts firm capabilities																					
		Low labour demand, low human capital produces high levels of migration and remittances	FEEDBACK OUTCOMES TO POLITICAL AND SOCIAL SETTLEMENT									↗	↗			↗	↗						
		Poverty reduction with sluggish growth																					
		Unequal human development and unequal opportunities despite poverty reduction																					

# Nepal Diagnostic Space

## Nepal Diagnostic Space



## About Oxford Policy Management

Oxford Policy Management is committed to helping low- and middle- income countries achieve growth and reduce poverty and disadvantage through public policy reform.

We seek to bring about lasting positive change using analytical and practical policy expertise. Through our global network of offices, we work in partnership with national decision makers to research, design, implement, and evaluate impactful public policy.

We work in all areas of social and economic policy and governance, including health, finance, education, climate change, and public sector management. We draw on our local and international sector experts to provide the very best evidence-based support.

### Find out more

For further information

visit: [www.opml.co.uk](http://www.opml.co.uk)

Or email: [admin@opml.co.uk](mailto:admin@opml.co.uk)

    OPMglobal



### Oxford Policy Management Limited

Registered in England: 3122495

Registered office: Clarendon House,

Level 3, 52 Cornmarket Street,

Oxford, OX1 3HJ, United Kingdom