

Public Policy for Growth and Poverty Reduction

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Abstract: *In this paper, I would like to outline an approach to public policy that is focused on fighting poverty and is based on an understanding of growth and development. Such a public policy requires answering two key questions. First, what are the key determinants of a development that benefits poor people – or what has been labelled “pro-poor growth”? And second, we need to answer the policy question: how can public action influence the key determinants we identify? In putting the questions this way, we are setting ourselves the task of building a dynamic public economics – a public economics of development. Given that development is the objective, this task will require a better understanding of how to measure it. And we must also achieve a better grasp of changes of behaviour in the process of development, since changing perspectives and behaviour are usually an integral part of the development story. In laying out our task of advancing a dynamic public economics, however, let me emphasise that we should be building on – not overturning – past theory. In much of the work I will describe, the empirics seem to be ahead of theory. Thus one of my purposes is to highlight some elements of an agenda for theoretical research. (JEL E6)*

1 Introduction

1.1 Brief review

Let us begin with a brief review of the changing ideas and perspectives on government and policy over the past 30 years. This will serve both to remind ourselves of what we are building on, and to see how the issues may go beyond these ideas. A major contribution of the theories of the last 30 years has been in deepening our understanding of the complementarity between states and markets.

- The public economics characterised by Boiteux (1949; 1956) and Diamond-Mirrlees (1971) embodied a recognition that the state did not have the capability or information necessary to direct production. Diamond and Mirrlees focused on production incentives for producers, both private and

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public, together with prices and taxes facing consumers, and they examined mutually consistency and optimality.

- These theories (in particular, that of Mirrlees, 1971) provided an explicit analysis of the trade-off between size and distribution of the cake in models of non-linear income taxation – and here again, at the heart of the problem was the construction of optimal incentives where information is limited and asymmetric.
- The theories provided an anatomy of market failure (we include here, of course, Berglas' contributions).

Thus at the heart of all this work was the complementarity between the state and markets. The questions were not in terms of “how much” of each, or even the “balance” between the two, but rather how they combine.

These were, of course, insights from theory, but they have also been supported by experience. If anything is clear from the experience of the economies in Eastern Europe and the former Soviet Union in transition to a market economy, it is that markets need sound government.

1.2 From statics to dynamics in public economics

The insights sketched above represent real achievements of lasting value. However, this theory does not determine the key drivers of ‘pro-poor growth’ – by which I mean growth in which poor people participate, both in its creation and its rewards. These drivers are my main topic here: the investment climate, and empowerment of and investment in poor people. This approach goes beyond size and distribution of the cake; it sees the issues of development and poverty reduction in terms of (i) generating growth and (ii) enabling participation in growth. Both elements are essentially processes with history, dynamic structure, and learning, rather than the one-shot events found in the static theory. Thus the challenge of public policy becomes one of how to understand and influence these processes.

Within this perspective, entrepreneurship is central. How, analytically, can we bring entrepreneurship into the story? How can we usefully model and strengthen the insights of the Austrian School (e.g., von Mises, Schumpeter, Hayek, Kirzner), which from the early 20th century recognized the centrality of entrepreneurship in the market process? How can we construct policies that create the conditions for entrepreneurship to flourish?

Entrepreneurship is about opportunities, risk, and return, but it is particularly about perceptions, and about the ability and willingness to respond to opportu-

nities by going beyond the routine and taking a step into the unknown. Theories about entrepreneurship should therefore include an examination of learning, beliefs, and expectations. It should also bring in role models. Who dominates society? Is it the warriors, thieves, or predatory bureaucrats who successfully grab large parts of the pie and kill incentives? Or is it the entrepreneurs who help make a bigger pie? The lessons of history, including that of the former Soviet Union and the Balkans, are clear: a society that is dominated by conflict and plunder has little future. (Sadly, conflict is all too often associated with plunder, as the causation goes both ways.) By contrast, a society that is led by creativity generates hope and results.

As Schumpeter (1934) emphasised so clearly, a competitive rule-governed environment is fundamental to the flowering of entrepreneurship. It has to be possible to enter markets and to innovate and to gain the rewards to innovation. Those working on development issues around the world surely see the potential for entrepreneurship in all societies. Yet all too often, when not misdirected into rent-seeking and plunder, entrepreneurship is suppressed by obstacles and hurdles erected, operated, and maintained by those in powerful positions, both public and private. It is undermined by weak governance and bureaucratic harassment – both organised and opportunistic. And it is frequently thwarted and discouraged by organised crime.

For example, World Bank firm surveys comparing the investment climate for manufacturing industries in China and Pakistan show that the typical Pakistani firm needed 72 days to get its most recent telephone connection, compared to 17 in China. The average time to clear the latest shipment of goods through customs was 18 days in the Pakistan sample, compared with nine in the China sample. Pakistani firms report losing 6 percent of their output as a result of power outages, compared to 2 percent in China. What emerges is a picture of Pakistani firms facing a more bureaucratic environment with poorer government services and infrastructure. Evidently many factors go into the overall investment climate. But in the manufacturing industries that we covered, semi-skilled wages are fairly similar in China and Pakistan. In an increasingly integrated world, then, it is not surprising that there is a large amount of foreign and domestic investment in the manufacturing sector in China, and virtually none in Pakistan. In a type of Gresham's Law of entrepreneurship, "entrepreneurial" predators from the private and public sectors tend to drive out productive entrepreneurship.

These notions are central to a broader examination of development. And they warn us against imposing some standard blueprint – a mistake some made at the outset of the transition from command to market economies in the region. But this was not a mistake made by the Chinese as they embarked on and de-

veloped their own transition from 1979. They moved step-by-step – experimenting, building on what went before, and finding their own way.

The analytical path ahead is not one Grand Unified Theory; instead, it will be a combination of strong empirics and a battery of dynamic theories. Although the two processes of fostering investment climate and the empowerment of, and investing in, poor people are my main concern here, two further challenges in developing more dynamic theories might be mentioned. Both challenges illustrate the importance of searching for insights in a number of directions. They have to do with behaviour (e.g., entrepreneurship), the meaning of welfare, and overall objectives.

1.3 Understanding behaviour

Development, especially the enhancement of empowerment and entrepreneurship, usually involves fundamental changes in perceptions, understanding, and behaviours. For example, education is central, and it changes both understanding and behaviours. A move from rural to urban often involves profound changes in perceptions. The role of women is fundamental to participation, education, health, and most economic activities. Changes in the understanding of both men and women are usually crucial for the greater participation of women in the economy and society.

Traditionally in economics, we model the behaviour of an individual in terms of optimisation for a given pattern of preferences and with fully specified constraints. We then base our analysis of individual welfare on the finding of outcomes that are ranked higher in terms of the individuals' given preferences. This is a powerful approach, and it has yielded real and enduring insights into the economics of policy. But we must recognise that development economics and societal change often involve fundamental changes in behaviour. Thus we need to look more deeply into how behaviour develops, adapts, and changes.

Empirically, behaviour is not always well represented by the simple maximisation of a fixed utility function in the face of fully understood budget constraints and prices. There are many important examples of great relevance for development where this approach to individual behaviour can be seriously misleading. First, individuals are not very good at understanding the informational nature of decisions, particularly those involving uncertainty. For example, in advanced countries, those making decisions about insurance, pensions, or investments will very often choose the option labelled as the default option whichever of the options is so prescribed. There would be many similar examples concerning loans and savings for poor people in developing countries. Second, addictive behaviour associated with alcohol, drugs, tobacco, and gam-

bling pervades developing countries as well as developed countries. Third, intense, dogmatic, and doctrinaire education systems, whether secular or religious, can have profoundly damaging effects on behaviour. Other systems, both secular and religious, can instil behaviour and codes that help build strong and creative societies and, in matters of health for example, can be life-saving. Fourth, behaviour can change dramatically under extreme conditions; for example, the Second World War in the UK transformed attitudes about the role of women in the workforce as well as about the health service, education, and social protection. Fifth, values can change from examples set by leadership. Many would argue that individual behaviour in Russia deteriorated in the 1990s in part from the example of large-scale looting of the state by powerful figures inside and outside public service. Standards in Indian public life were probably corroded by Mrs. Gandhi's funding of elections using the proceeds of corruption in the 1970s. All these examples surely demonstrate the importance of examining the determinants of behaviour, particularly in societies undergoing profound structural and social change.¹

In understanding behaviour, culture will often be central. One clear example comes from a health centre and clinic that I visited in a small town, Paruro, in a poor, largely rural, part of Peru. A local initiative made an effort to increase the number of women from rural areas who attended the clinic for childbirth. Local discussion and a review of earlier projects indicated that women from remote rural areas were unwilling to leave their children for an extended period, found the clinic cold, and were uncomfortable using formal Western birthing positions. The project established a "waiting house" where women nearing childbirth could be lodged and fed, with their children, in accommodations close to the clinic; it also installed extra heating in the birthing room and provided a bed that could serve as an alternative to the standard Western "birthing table". The result was a dramatic rise in medically attended birth and a significant fall in mortality of both babies and mothers. These practices have also been followed by many other health centres in rural areas in Peru with similar results. This example demonstrates clearly how attention to cultural issues can lead to great advances in fighting poverty – in this case on the health dimensions – and in the general development effectiveness of projects and programs. It shows also that successful experiments can spread or be "scaled up" – a crucial step if we are to increase development effectiveness.

Let me caution that these examples should not lull us into a belief that we could or should take up "cultural engineering". But we should encourage cultural awareness and innovative approaches to improvements and problem-

¹ I am happy to note that since this lecture was given, a Nobel Prize in Economics was awarded to Daniel Kahneman "for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty".

solving. And of special importance is the building of environments and cross-learning capacity so that successful innovations can spread, as has often happened during China's reform period.

It is now widely accepted that institutions, and the question of how to build them, lie at the heart of the development process. However, these examples concerning behaviour suggest that formal institutions are only a part, and often a small part, of the story – they are often only the tip of the iceberg. Many reforms fail because they change only the formal laws above the waterline, while having little effect on the behaviour, norms, and attitudes which lie below the surface.

1.4 Broadening the objectives of public policy

The second challenge follows in part from this discussion of changing behaviour. If the preferences that drive behaviour are endogenous, then the approach of traditional public economics is undermined – for we cannot simply take the preferences that people express through their current behaviour as an unambiguous basis for assessing their welfare. This simple preference-welfare approach is further complicated if we ask whether people's welfare is, in any case, correctly seen only in utility or preference terms. Amartya Sen, in his book *Development as Freedom*, has argued that development is about the expansion of capabilities, or in one sense, expanding the ability of an individual to shape his or her life. At the same time, however, this broadening in the direction of capabilities or freedom can reduce the difficulty associated with endogenous preferences, in the sense that it plays down the role of preferences in assessing welfare changes. These broader perspectives take us way beyond spending power in thinking of the objectives of development. They point to the importance of ensuring that people have greater power over the decisions that most affect them. And they point further to the importance of increasing security. The challenge is to build these other objectives into more formal analyses of poverty and public objectives.

Let me now put these two future challenges to one side, however, and elaborate on the central set of issues that are my focus here. The issues concern the analysis of the twin and intertwined processes of (i) improving the investment climate and (ii) empowering and investing in poor people. In focusing on these two processes as key drivers of pro-poor growth, please note that we are *not* talking about steady states, about being on a production frontier, or about comparisons of two equilibria. We are talking about processes of change, adaptation, creativity, and learning.

2 Building an investment climate for growth and opportunity

Growth depends on entrepreneurship, and entrepreneurship depends on the climate surrounding ordinary business activity for farms, small firms, larger firms, and foreign firms. Macroeconomic instability, bureaucratic harassment, and failing infrastructure can strangle initiative, and they tend to hit small firms and farms hardest. Thus, the central public policy question here is: “How can countries develop governance and institutions to support entrepreneurship and well-functioning markets – or, in other words, how can it build an investment climate that will generate growth and development?”

2.1 The investment climate and the role of public economics

The policy challenge is thus to promote growth through improvements in the investment climate; it is about creating conditions so that the pie keeps expanding. It is not just a question of how to avoid or limit losing slices of the pie, as measured by Dupuit-Harberger triangles or even ‘rent-seeking quadrilaterals’ – which are, crudely speaking, the type of losses which lie behind standard trade-offs between size and distribution of the cake in basic static public economics.

The investment climate notion forces us to look at government through the eyes of the private sector – first and foremost, small entrepreneurs and farmers. And we must always remember that the most important small and medium enterprises (SMEs) in many developing countries are usually the farms. In focusing on SMEs, we are not neglecting or forgetting entrepreneurship elsewhere. Policy and institutional reforms that improve the climate for SMEs will usually also improve the climate for large and foreign enterprises.

One important source of entrepreneurship is in break-aways from large (seed-bed) firms by teams that pursue new products and new markets outside the strategic focus of the large firms. This hive-off route to entrepreneurship and new SMEs is particularly important where the business environment is as yet rather inhospitable to the isolated entrepreneur. It is a key policy challenge to devise ways to partially internalise the social gains from this positive externality so that large seed-bed firms will not only tolerate but promote the process. The general policy rule is to pay close attention to how entrepreneurial “juices” are flowing in a particular institutional setting and then try to break the barriers and widen the channels for the more productive flows.

For growth to happen, entrepreneurs need to be able to recognise and create opportunities to increase productivity and make productive investments. And they need an environment where they can pursue those opportunities effec-

tively. Thus we need to think of a dynamic model of their behaviour built around: (i) the constraints on their entrepreneurship; (ii) their ability to recognise and create opportunity; and (iii) their learning processes. It is, of course, about risk and return, but what we are trying to understand here is not only the determinants of risk and return but also the determinants of entrepreneurs' perceptions and their ability to respond. The normative theory of the relevant public policy will have to be based on positive models of the investment climate and the processes that change it.

Ideally, a clear structural theory of the investment climate would lead us directly to a definition of appropriate indicators for its measurement. I suspect that a careful examination of more modern growth theory in the Schumpeterian spirit has much to offer – see, for example, Aghion and Howitt (1997). At present, however, we offer a pragmatic definition and approach for the investment climate, one that is based on the intuitive notion described above and on the responses of firms surveyed about barriers to entrepreneurship.

The investment climate can be analysed in terms of several broad sets of variables.

- *Macroeconomic and trade policy.* The importance of macroeconomic stability and of the openness of trade to entrepreneurship and investment is increasingly regarded as obvious. And policies on these dimensions have improved greatly in developing countries in the last two decades. Important as these issues are, however, they are only part of the story, and it is a fundamental mistake to believe that they constitute the whole story. The deeper problems with the investment climate are structural and concern governance, institutions, and infrastructure.
- *Governance and institutions.* The ability of firms to pursue innovations and investments is profoundly influenced by governance and institutions. Governance is not an elegant word and is often used loosely. However, the definition given by the *Oxford English Dictionary* – “the manner of governing” – is helpful in that it leads directly to a focus on the behaviour of those who are governing and who are in public service. Bureaucratic harassment is a fundamental constraint on and discouragement to entrepreneurship. So too are crime (organised and otherwise) and lawlessness. The absence of well-functioning legal and regulatory institutions can undermine or suppress entrepreneurial activity; so too can weak financial institutions. The functioning of a whole range of institutions, including those that shape labour relations and skills, can have a profound effect on the ability to pursue creative and productive activity.
- *Infrastructure.* Weakness of the infrastructure is often the first obstacle to entrepreneurship that firms identify. Power outages and variable voltage

can frustrate economic activity, for example, and it is difficult to build businesses without telephones and water supply. Problems in the infrastructure can arise for various reasons, but they are often associated with weak governance. Whatever their source, they can be very destructive of innovation and productive activity.

2.2 The investment climate: identifying the obstacles

Good public economics depends on good empirical information and analysis. These, in turn, should be related to theory. The basic theory of public economics, which advanced strongly in the 1970s, focused on the structure of individual or household demand and on aggregate supply and demand functions. Accordingly, applied work centred on household surveys and the structure and estimation of supply and demand functions. Similarly, empirical work to inform public policy from the perspective of the investment climate should help to understand the problems along the dimensions just described. The identification of obstacles to investment and productivity growth must take place in a given country context. Even within a single country, obstacles often differ by region. A survey of Russian firms indicated that there is no single region with an ideal investment climate, but showed considerable regional variation in the barriers to entrepreneurship. In Smolensk, for example, businesses have fewer problems with excessive inspections but more problems with license and certifications, whereas the opposite is true in Moscow City. Different countries and regions face different constraints and problems, and the institutional and governance responses to the challenge of improving the investment climate thus will also vary across countries. In this, as in other policy areas, there are common principles, but there should be no “one size that fits all”.

How can we gather information? A number of routes have proven to be fruitful:

- *Consultation with relevant groups.* Such consultations will usually involve a strong element of the qualitative. This consultation should go beyond chambers of commerce or other representatives of large firms and multinationals to include diverse representatives of all firms, particularly farmers and micro-entrepreneurs. It should avoid giving undue weight to lobbyists and special pleading. The World Bank has been engaged in such consultations in a number of forums, including the participatory Poverty Reduction Strategy processes used in very poor countries.
- *Learning through direct experience* of the investment activities of the multilateral development banks (International Finance Corporation, EBRD).

- *Careful surveys of firms to identify constraints.* These surveys are used to make strong quantitative assessments of the investment climate. There are now a number of systematic and structured surveys that are already proving their worth, and this approach will take on great importance in the future. The existing surveys show that we can be empirically rigorous, quantified, and structured in measuring key elements of the investment climate. Let me draw on results from India, where the research department (DEC) of the World Bank is collaborating with the Confederation of Indian Industry (CII) on firm-level surveys of the investment climate. For an illustration of what can be learned through such surveys comes, we can compare the investment climate in Maharashtra, an Indian state with a population of 100 million, with that of Uttar Pradesh (UP), another state with a population of 170 million. One measurable dimension of the investment climate is the number of visits that local authorities make to the firm – and we find that these are twice as common in the survey in UP than Maharashtra. It is unlikely that these visitations are constructive and probable that they are predatory.

Another dimension is the availability and quality of infrastructure. In UP, the power infrastructure is so weak that more than 90 percent of firms have their own generator; the comparable figure for Maharashtra is less than 50 percent. This discrepancy is one reason for the surprising finding that Uttar Pradesh, although much poorer than Maharashtra, has higher capital/labour ratios. We teach our students about the relationship between capital intensity and factor prices, but in this case another factor overturns the prediction that we would derive from standard microeconomic theory – that UP, with its low wages, would be less capital-intensive than Maharashtra.

From these surveys, we can build stylised facts that will serve as the basis for further investigation. But we find already that those Indian states with better investment climates are growing and reducing poverty more quickly. These surveys provide a valuable and exciting basis for further theoretical and empirical research.

3 Involving poor people in growth

The kind of research on the investment climate that I have described helps shape public policy in responding to the challenge of promoting investment, productivity, and growth. At the same time, the task of fighting poverty requires that public policy also work to ensure that poor people can participate in

growth. This second process, fundamentally intertwined with the first, is a second crucial challenge for development-oriented public economics.

3.1 Growth, poverty, and dynamic public economics

First, let me review what we know about the relationship between growth and the welfare of poor people. The cross-country evidence does not suggest that higher growth reduces the income shares of poor people (see Dollar and Kraay, 2001; World Bank, 2002). Interestingly, the results seem to go different ways in different continents. In Africa higher growth has been associated with higher income shares for the lowest quintile, but in Latin America it has gone the other way. Thus we cannot take for granted a given relationship between growth and changes in income shares for poor people – whether it be up, down, or no association. Economic structures matter. So too do government policies in such areas as education, health, and social protection. There are choices to be made and much can be done to involve poor people in a growth strategy.

Key to ensuring that poor people are empowered to participate in growth is making sure that they have the tools necessary to participate and that institutional structures facilitate rather than prevent their participation. Crucial public policy elements here include working to involve poor people in decision making in the public sector, promoting participatory social organisations², and ensuring legal protection. These activities, together with education, health, and social protection, can together provide the circumstances for real empowerment and effective participation.

We have argued above that firm-level surveys, when they solicit information on the obstacles that firms face in innovation, investment, and entrepreneurship, can underpin policy on the investment climate and growth. Similarly, household and individual surveys that ask about empowerment and participation, together with surveys of basic service providers (such as health centres and schools) and of government units, can help us formulate public policy on empowering and investing in poor people so that they can participate in the process of growth. The World Bank has also been investing strongly in such surveys; see, for example, the three volume of *Voices of the Poor* (Narayan et al., 2000a; 2000b; 2002) and the work on providers that is under way for the *World Development Report 2004* on basic services. I would suggest that empirical public economics going forward will and should have a strong focus on

² Although Robert Michels is best known for pointing out the oligarchical tendencies in organizations, we might recall his starting point: "Organization is the weapon of the weak in their struggle with the strong." (Michels, 1962, Chapter 1)

these three types of surveys – firms/investment climate, households, and service providers/government units – just as the empirical work stimulated by the theory of the 1970s focused on household expenditure surveys and aggregate demand functions.

In assessing where we now stand in our understanding of the first pillar of the investment climate, I suggested that the empirics were ahead of theory. On the second pillar of empowering and investing in poor people, I would suggest that the same ranking holds. In both cases, we are at the beginning of a long program of research and, in my view, we have much further to go on both the empirics and the theory of the second pillar than the first.³ I suspect that modern theories of organisation and incentives may have quite a lot to tell us about why some modes of service provision work better than others.

Although this research program is still in its early days, let me speculate that there are lessons from static theoretical and empirical work that can be generalised to the dynamic. We know that the expenditure side is key to static redistribution in rich countries.⁴ I would expect that the same lessons would apply to dynamic participation for developing countries.

Further, the dynamic approach leads to a perspective on distribution that sees the individual as the object of welfare, and not just the family or household. Education, for example, benefits the individual educated and will usually increase future incomes. From this perspective we should, when thinking about distributional issues, take account of benefits that accrue to individuals over time and not simply those that accrue to households now. Again, this is a perspective on public economics that is *dynamic*.

The perspective here is not primarily about the static redistribution of income, but about ensuring that the pie grows and that poor people both help drive and benefit from the process. The lives and prospects of individuals and their families can be transformed by:

- education and health care, which increase their employability and ability to become successful entrepreneurs;

³ For a first fruit of that program see Narayan (2002). For an earlier collection of case studies, see Krishna et al. (1997).

⁴ An illustrative example is from the United Kingdom. An analysis conducted at the UK's Office for National Statistics (Lakin, 2001) shows the effectiveness of cash transfer policies in reducing inequality. The results for 1999-2000 show that the Gini coefficient (a measure of inequality) of market income for the UK is 0.53. If one adds the impact of cash transfers made by the government, the gross income inequality Gini coefficient registers a much more equitable 0.38. If one takes this gross income measure and then considers the impact of the income taxes in place in the UK, there is only a marginal further decline in the Gini coefficient to 0.35. Finally, adding in the impact of indirect taxes pushes the Gini coefficient back up to 0.40. The simple conclusion is that the net public sector impact is strongly redistributive, but the redistribution occurs primarily on the expenditure side.

- social protection, which allows them to take the risks that participation in a dynamic market economy entails – the dynamic perspective on social protection is as a springboard whereas the static perspective sees it as a social safety net;
- social organisation and empowerment through the legal system, which improve the chances that their voices will be heard, that they can use their assets, and that they will not be cheated or excluded.

It might be noted that these dynamic perspectives do not exclude, contradict, or reject the standard arguments concerning taxation for education, health, and redistribution. They build on them.

3.2 What can we do to promote the involvement of poor people in growth?

From our analysis of how poor people can get involved in growth, we find some fairly direct public policy lessons or approaches. The challenge of empowering and investing in poor people is, in large measure, the challenge of ensuring effective and efficient creation, availability, and delivery of basic services. This is the topic of the *World Development Report* that will come out in September 2003. In responding to the challenge, countries need to focus on both the level of resources devoted to basic services and the efficiency with which they are used. Just as with work on the investment climate, we are learning how to use both qualitative and quantitative information to improve the creation and delivery of basic services:

- Quantitatively, it is important to gather information about whether services are actually reaching poor people, and in what quality – e.g., do people have access to clean water, are children being immunized, are teachers showing up at schools and doctors at clinics, do the schools have books and computers, and do the clinics have drugs and functioning equipment? For this reason, as I noted earlier, we are launching basic service delivery surveys that are analogous to the investment climate surveys. Some of the results of these surveys will form a key foundation for the *World Development Report* of next year.
- Qualitatively, we must work to ensure that citizens', consumers', and parents' groups have a chance to make their voices heard. One challenge, for example, is to encourage teachers to attend school; teachers show up for work more when parents are involved in the governance of schools (as we have seen from the District Primary Education Programme in India and the EDUCO program in El Salvador). We have also seen the power of information, for example in the Uganda expenditure tracking project that in-

volved publishing the amounts of funds supposedly distributed from the Government to the school districts (see Reinikka, 2001). In this case, increasing the transparency of transfer of public funds yielded a dramatic increase in the fraction that actually arrived, from an average of 13 percent to about 90 percent over just a few years. We should not assume that these examples operate solely through the greater monitoring and reward-oriented motivation that might come from greater participation by beneficiaries and their representatives. There is likely, for example, to be much greater job satisfaction and self-esteem if teachers see parents as constructively involved (see Tendler, 1997, for examples of successful programs that emphasised the commitment and dedication of service workers).

While there is no doubt that the manner in which we use resources is just as important as the quantity of resources, it is indisputable that public health, hospitals, clinics, schools, and social protection require substantial resources, however well those resources are used. For these reasons, tax revenue is fundamental. A society that is unable to raise revenue is unlikely to enjoy strong and sustained growth or be able to ensure that poor people can participate.

Health and education outcomes are not determined wholly or even largely by activities in those sectors. Health depends strongly on income and education, particularly of mothers. Similarly, children often cannot get to school without transport and infrastructure. Public policy in these areas of empowerment is therefore much deeper and more complex than would be suggested by simple approaches to resources applied and incentives used in health and education.

4 Where does this perspective of entrepreneurship and learning take us in public economics?

As an illustration of where this approach to development can lead us, the following five examples show how this more dynamic approach to development issues and public policy pushes us beyond the simple story. All five examples are concerned with the endogeneity of innovations, behaviour, and institutions.

4.1 Returns to scale

Many economists have looked at agricultural production functions from the perspective of productivity (usually expressed in terms of output per acre) in small farms versus productivity in big farms. Such analyses have underpinned discussions of technology policy, land reform, and agricultural taxation. But the policy implications for productivity concerning small versus large involve much more

than issues of returns to scale as seen from static production functions. Dynamic issues concerning innovation are also central, as examples in Latin America and Eastern Europe make clear. Latifundia economies and soviet-style communism are two examples where seeking higher productivity through returns to scale (in one case through a market structure, in the other through a command economy) had the effect of killing the long-term developmental effects for most participants. Short-term efficiency, often distorted by entrenched vested interests, was pursued in a way that damaged long-term development and the empowerment of people to create and innovate. Nicholas Kaldor was fond of emphasising that Marx had fully understood increasing returns to scale and frequently quoted Marx's description of competition amongst capitalists for lower costs via scale "Accumulate, accumulate; that is Moses and the Prophets" (Vol. I of *Kapital*). But accumulating to exploit scale with one product may foreclose on innovation for the next generation of products. As Schumpeter put it, "new combinations are, as a rule, embodied... in new firms which generally do not arise out of the old ones but start producing beside them; ...in general, it is not the owner of stage-coaches who builds railways." (1934, 66)

Work that offers individuals and firms no room for initiative, learning, and growth – for example, because of excessive specialisation in the pursuit of static returns to scale – can have effects on human development and entrepreneurship that are profoundly disempowering. Adam Smith recognised clearly the potentially deadening effect of repetitive factory work directed by others. Thomas Jefferson had a similar perspective, with his vision of small farmers and businessmen as providing a constant revitalising effect, which he contrasted with the static efficiency of big combines. A more recent and very important example lies in the dynamism of Chinese township and village enterprises (TVEs). These were much more dynamic and creative than the monolithic state-owned enterprises (SOEs), which became a heavy burden on the economy. Deng Xiaoping knew that an entrepreneurial force was being liberated when TVEs were permitted, but as he himself later said, the creativity and dynamism that emerged was a surprise to the leadership. Consider this 1987 quote from Deng Xiaoping:

Generally speaking, our rural reforms have proceeded very fast, and farmers have been enthusiastic. What took us completely by surprise was the development of township and rural industries. All sorts of small enterprises boomed in the countryside, as if a strange army had appeared suddenly from nowhere. This is not the achievement of our central government. Every year, township and village enterprises achieve 20 percent growth. This was not something I had thought about. Nor had the other comrades. It surprised us. (People's Daily, 13 June 1987, cited in Becker, 2000, p. 68).

Kibbutzim and moshavim are examples in Israel that, in their time, showed how to combine some scale with empowerment – using the special “social capital” of a historical movement.

All these examples embody vital dynamics, learning, and creative forces. Any policy towards development, industrial structure, and regulation that does not take such forces into account risks being profoundly misleading.

4.2 Specialisation with gains from trade

In considering the effects of specialisation, the contrasts between China and Soviet Union are instructive. The Soviet Union pursued gargantuan, highly specialised plants. This was partly due to misplaced confidence in static returns to scale, but also partly as a means of economic and political control: highly specialised units and regions were all “held hostage” to each other and could be controlled by Stalin’s central command. China, by contrast, aimed for broad regional self-sufficiency and capability.

Mao’s more decentralised and generalist approach built on Chinese history. It placed a strong emphasis on regional self-reliance so that each region learned to do many things – albeit not always efficiently. When the freeing of the economy came later, China reaped the gains from specialisation and trade between regions. The availability of goods and skills locally allowed, for example, the entrepreneurial cabinet maker to find tools nearby so that his nascent entrepreneurship had a chance of getting off the ground. It would, of course, be quite wrong to suggest that Mao planned it all this way. The market reforms of Deng had to wait for Mao’s death. But the difference between the economic structures that emerged from the Mao and Stalinist strategies here is very important in understanding the subsequent development of the very different Chinese and Russian transitions from command to market economy. Stalin’s model of the Soviet Union was of early hyper-specialisation, built upon an ideal of static increasing returns to scale. It sacrificed the longer-term dynamics and left a legacy of rigidity and fragility.

A policy lesson here is to seek flexibility and adaptability. Do not try to pick a single winner early on; do not force over-focus. Try to create conditions for learning where entrepreneurs can not only act and move but are led to seek out potential areas of advantage and growth across a broad spectrum of economic activity.

4.3 Growth and inequality

Growth with large inequality can suppress the potential for future growth. Initial winners can use their influence with the government to “remove the ladder” – that is, to limit competition from other elements of society. Over the long run, such measures can strangle growth. Three historical examples illustrate:

- Acemoglu et al. (2000; 2001) note that in the 19th century, both North and South America had large tracts of land and raw materials and were conquered and settled by Europeans. These authors argue that the endogeneity of institutions is crucial to understanding the divergence in subsequent development of the two regions. Institutions and growth have a two-way relationship that can create a kind of dynamic increasing returns. An improvement in investment climate leads to more small and medium firms, creating a constituency for a further improvement in the investment climate. This is a description of key aspects of the North American story. In South America, with much greater inequality, powerful vested interests captured the state and were therefore able to restrict competition and innovation.
- A further example comes from the USA in the first part of the 20th century. The North American “robber barons” at the turn of the century were similarly motivated to restrict and exploit, but they were eventually defeated by more progressive movements, for example through the anti-trust legislation of that period.
- Finally, one interpretation of what happened in Russia in the 1990s is that the oligarchs first grabbed their positions and then tried to consolidate and protect their winnings (some would say “loot”), most notably by limiting the development of a broad economy of independent small and medium-sized firms.

4.4 Internalising externalities

One part of the static theory of externalities points to combining units that exhibit mutual externalities into a big unit where all the interactions are, in theory, taken into account. But such overlaid and powerful entities are likely to stifle innovation. Hirschman noted that while innovation might cause losses for some, “internalization is likely to result in an overestimate of the prospective losses” (1961, p. 61).

Thus one is more likely to get innovations that will end up benefiting the many when there is multi-centered competition in either the economic or political sphere than when there is internalisation and then centralised project selection (e.g., compare Renaissance Europe and China). It is much more likely that an appropriate public sector response to externalities lies in trying to regulate and tax in a way that allows different entities to innovate and compete, while at the same time ensuring that they pay for damages inflicted on others or are regulated to prevent them from inflicting damage.

4.5 Environment and sustainability

Related issues arise when we look at the environment and sustainability. There are those who appear to argue that the only way to live in harmony with the environment is to restrain growth. But that is unlikely to be a promising approach. Furthermore, it is probably also a mistake to see the issue as (simple) sustainability, and it is a mistake made by much of growth theory, in terms of long-run equilibrium or steady-state growth. It is better to see sustainability in terms of the challenge of creating new opportunities, anticipating and responding to problems, and innovating as circumstances change. In many structures, the incentives for adaptation are distorted, in that they take inadequate account of the long-term and destructive effects of many actions on the environment. The right reaction is not to restrict growth and change but to restructure incentives through taxation, regulation, and the promotion of appropriate institutions. In this way we can try to foster the kind of learning and searching that finds ways of growing and changing that do not damage, or indeed can overcome damage, to the environment. This approach to sustainability lies at the heart of the *World Development Report 2003* (World Bank, 2003).

In cases where current trends are very harmful, then the appropriate response may involve strong enforcement actions or very high taxes. Such interventions would have to be guided by an understanding of how people learn. For example, there was little reaction in terms of technology to the first oil price shock of the early 1970s. However, the second oil price shock, in the late 1970s, led to an explosion of technological research and innovation in the direction of more efficient energy use, particularly in Europe but also in the United States. People learn from big changes, and perhaps learn more when they see more than one occurrence. There may be lessons for dynamic tax policy here.

5 Some lessons and conclusions

Let me conclude with some lessons for the dynamic political economy of reform that run through the examples just presented. They can be presented in terms of two quotes from very distinguished and thoughtful writers on these issues.

... it is the nature of most innovations that its beneficiaries are anonymous, inarticulate, and unaware of the benefits-to-accrue (they include among others the consumers that are yet unborn), while those who stand to lose from the innovation are highly vocal vested interests.

That was Albert Hirschman over 40 years ago (1961, p. 61).

It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order. Thus it arises that on every opportunity for attacking the reformer, his opponents do so with the zeal of partisans, the others only defend him half-heartedly, so that between them he runs great danger.

That was Machiavelli about 500 years ago (1940 [1513], Chapter 6).

The dynamic notions of public economics I have tried to sketch here not only provide a way forward economically, but also have political advantages, which take into account the difficulties highlighted by Hirschman and Machiavelli. Static redistribution, for example, is more difficult to sell politically and to implement in the face of entrenched interests than is the notion that all children should have an education that allows them to participate in the process of growth. As Eitan Berglas recognised very well, our arguments have not only to be coherent and logically tight; we must be able to frame them in a way that is politically persuasive.

The approach to public policy proposed here is first to ask what drives improving living standards, particularly of poor people. We then ask how to influence these drivers. The drivers that we identified as twin pillars of pro-poor growth were, first, the creation of an investment climate for entrepreneurship, investment, and growth and, second, the empowerment of and investment in poor people, so that they can participate in the growth process.

This perspective led us into the details of what the investment climate and empowerment mean, and how to investigate them both empirically and theoretically in a way that illuminates policy. I argued that empirical work is moving quickly and the theory less so. From the conceptual perspective, what I am

suggesting is that we introduce the spirit of the Boiteux-Samuelson-Diamond-Mirrlees and Berglas public-policy approaches into models that embody an approach to growth based on the insights of Hirschman and Schumpeter. The theoretical side will involve a bundle of complementary approaches, not just one. I believe that much of this conceptual development is already happening in the profession that there is no greater task before us than building a public economics that will promote growth, development, and poverty reduction worldwide.

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