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Academic Scribblers and Defunct Economists

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Three broad theoretical approaches characterize the history of development economics: state-led growth, which dominated from the 1930s until roughly 1980; liberalization theory (the ‘Washington Consensus’), which dominated in the 1980s; and institutionalism, which dominated subsequently. After 2000, development scholars increasingly focused on the legal institutions that support markets: property, contracts, and business law. This essay focuses on legal institutions that support economic innovation, which causes sustained growth. Developing countries mostly innovate by discovering new markets and adapting organizations, which is risky. A risky venture that unites capital and new ideas poses a problem of trust: the investor must trust the innovator not to steal his money, and the innovator must trust the investor not to steal his ideas. If institutions supply the means for entrepreneurs to solve the double trust dilemma, the economy strides ahead through innovation. Conversely, if institutions fail to supply the means for entrepreneurs to solve the double trust dilemma, the economy hobbles along without improvement. The origin of a nation’s laws — whether common or civil law — is not so important as the ability to adapt law to business innovations.

Keywords: law and economic development/development economics

1 Introductory note by Bob Cooter

A senior scholar in law and economics is someone who can remember its history. Michael Trebilcock and I are such people. I encountered Michael soon after I started down the path of law and economics in the late 1970s. The path was lonely at first, but, as we walked together, it swelled into a crowd. I always regarded Michael as a special friend. (Michael has a lot of special friends among people who love ideas.) Besides shared history and friendship, I owe Michael a particular debt that relates to this article. It draws on a chapter from a book manuscript titled Solomon’s Knot: How Law Can End the Poverty of Nations, co-authored with Hans Bernd Schaefer.¹ The book is built around a central image of the law uniting new ideas and capital to produce innovation and growth. To unite them, the innovator must trust the investor not to steal his ideas,

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and the investor must trust the innovator not to steal his money. Bernd Schaefer and I called this the ‘double trust problem of development’; Michael, with an ear for alliteration, said, ‘No. It’s the double trust dilemma of development.’ As usual, he was right. With thanks to Michael, we turn to our subject: the intellectual history of development economics, which we view as the prelude to law and economic development.

II Who cares about ideas?

Eighteenth-century physicians thought that an imbalance in the blood caused disease; to restore the balance, they used leeches to suck the blood of people already weakened by disease. This treatment apparently hastened the death of the ailing composer Mozart. Similarly, false theories of development weaken economies and sometimes kill people. Perhaps the worst example of death from bad economic theory was collectivizing agriculture, which contributed to starvation and disease that killed up to 40 million Russians and Chinese in the twentieth century. Poverty is generally bad for your health – life expectancy today is eighty-two years in Japan and thirty-nine years in Zambia.

How much do economic ideas, bad or good, affect economic policies? John Maynard Keynes, the great theorist of the 1930s depression, took the view that little else matters:

The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct

3 The Soviet Union apparently suffered approximately 10 million military deaths and 12 million civilian deaths during World War II, which also killed approximately 4 million Chinese military personnel and 6 million Chinese civilians. So the combined total of war deaths is around 30 million. Robert Conquest estimates famine deaths in the Soviet Union at 11 million from 1926 to 1937, and China’s Great Leap Forward apparently resulted in around 30 million deaths. So the combined total of famine deaths is over 40 million. Estimates of deaths vary significantly by source. Collectivization of agriculture occurred in the context of other disastrous policies that also contributed to these deaths, such as forcing farmers to neglect agriculture and work in village industries in China. For a comparison of estimates see Matthew White, ‘Source List and Detailed Death Tolls for the Twentieth Century Hemochlysm’ (2005), online: Matthew White <http://users.erols.com/mwhite28/warstat1.htm>. For a list of casualties by country in World War II, see Wikipedia, s.v. ‘World War II Casualties,’ online: Wikipedia.org <http://en.wikipedia.org/wiki/List_of_World_War_II_casualties_by_country#Casualties_by_country>.
This article gives a brief history of development economics to show how the ideas of economists, both good and bad, have affected economic development. (We have written separately about how political power affects development.)

### III Schematic theories of economic development

We will distil three broad theoretical approaches from the history of development economics and stylize their claims about the causes of growth. The first approach emphasizes state leadership in the economy. The state can lead through central planning, as in Communism; through ownership of the key industries, as in socialism; or through pervasive regulation and manipulation of prices of markets. The theory of state-led growth dominated development economics from the 1930s until roughly 1980. According to this theory, free markets cause insufficient capital accumulation and slow growth in developing countries. Administrators and politicians in developing countries should choose promising industries and direct capital to them through state ownership of corporations, planning, subsidies, and regulations.

To illustrate the logic of state-led growth, a construction site in Sri Lanka has 100 workers; ninety-nine of them use hand shovels to excavate the same amount of dirt that one worker excavates using a power shovel. If a second power shovel were available, production would rise by almost 50 per cent. According to the theory of state-led growth, free markets under-invest in power shovels and the like, whereas state planners increase the rate of investment and allocate the funds across industries as best for society.

The second broad approach emphasizes market liberalization as the cause of growth. Liberalization theory, which is associated with neoclassical economics, favours the allocation of capital by markets. To allocate resources efficiently, liberalization theory holds, developing countries must eliminate distortions that come from subsidies, regulations, and trade barriers. Developing countries should privatize, deregulate, and adopt free trade – just the opposite prescription from state-led growth. Liberalization displaced state-led growth as the dominant theory of development in the 1980s, especially under the influence of the World Bank and the International Monetary Fund. The location of these two organizations gave liberalization theory its name – the ‘Washington Consensus.’

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6 Cooter & Schaefer, *Solomon’s Knot*, supra note 1 at c. 12.
Liberalization theory makes optimistic predictions about capital markets. According to this approach, local, national, and global markets channel capital to wherever it will earn the highest rate of return. The rate of return is higher where capital is scarce relative to labour, as occurs in poor countries, so capital markets will cause poor countries to gain capital faster than rich countries, and living standards will converge in different nations. To illustrate using the preceding example, free capital markets will cause the construction firm in Sri Lanka to buy additional power shovels so long as their productivity exceeds their cost; construction companies in Sri Lanka will continue buying additional power shovels and the like until the ratio of capital per worker resembles that of countries such as France or South Korea.

Instead of emphasizing state leadership or liberalization, the third approach focuses on ‘institutions.’ This vague term usually refers to established, enduring practices that constrain policies. In the language of Douglass North, institutional constraints are the ‘rules of the game’ that constrain policy makers. Thus ‘institutions’ include social and legal norms that sanction rule breakers, as well as the organizations that sustain them. According to this approach, institutions determine the actual consequences of an economic policy. The same policy – say, an industrial subsidy or the regulation of a market – can have different consequences depending on the institutional setting. To illustrate, regulations that restrict logging can stop deforestation or merely provide forestry officials with a new source of bribes.

Underappreciation of institutional constraints doomed central planning and impaired liberalization. Institutionalism apparently explains the failure of state-led growth and liberalization; identifying the particular institution that botched a policy gives historical detail to an explanation of failed economic growth. To go beyond a critique and supply its own theory, however, institutionalism must identify general causes of growth. A causal theory is a licence to focus on some variables and ignore the others.

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7 The marginal benefit of capital declines with the amount thereof, so countries with the least capital benefit the most from getting more of it. Furthermore, the marginal benefit measures the amount that borrowers will pay for capital in a competitive market. Capital markets will lend where borrowers pay the most, which is in poor countries, where the marginal benefit of capital is greatest.

rest. Which institutions generally matter to economic growth, and which ones can be ignored?

We could look in many places for the institutions that matter – government organizations such as ministries, civil service, courts, police, and political parties; economic organizations such as business organizations, trade associations, professional organizations, exchanges, guilds, labour unions, ethnic trading networks, and organized crime; religious institutions such as churches, mosques, temples, and charities; educational organizations such as schools, universities, and research organizations; and social organizations such as family, marriage, and communities.

After 2000, development scholars increasingly focused on the legal institutions that support markets. The contemporary turn to law began when economists looked carefully at the role of law in finance and compared the performance of different countries econometrically. In contrast, state-led growth and liberalization theory mostly neglected law, or focused on the wrong law. State-led growth favours policy over law and rejects private law in favour of public law; neoclassical economics make no explicit reference to law, and liberalization emphasizes repealing public laws that impede markets. In contrast, the recent turn toward legal institutions stresses property, contract, and business law. The legal institutions that matter effectively protect property rights, enforce promises, and assure the integrity of business organizations. This turn toward private law recalls Psalm 118: ‘The stone the builders rejected has become the capstone.’

In contrast to other approaches to legal development, we focus on legal institutions that support economic innovation. Shingles repel rain better than thatch, a tractor ploughs faster than a hand hoe, antibiotics cure infections better than sulpha drugs, exchange with money is quicker than barter, investment banks allocate capital more efficiently.


10 Ps. 118:22.
than a rich nobility, insurance provides more security than gold bricks, and universities educate more people than tutors. Almost everyone counts such changes as improvements that enrich a nation. Economic innovators generally discover new goods to make or new ways to make goods.

In every country, growth occurs through innovation, but the form differs. We distinguish innovations into technology, organization, and markets. Innovations in Silicon Valley usually have a technological basis, such as new computer chips or programs that were previously unknown to the world. Instead of improving technology, many innovations improve organizations and markets. Thus Philip Knight, co-founder of the Nike Corporation, began by selling running shoes out of the trunk of his car in 1972; in 2006 the company reported US$15 billion in worldwide sales of sports equipment and clothing. Knight obviously discovered something new, but what was it? Nike designs and markets sports equipment and contracts with foreign firms to make the goods. What Knight discovered was the organizational formula for outsourcing in sports equipment.

Developing countries innovate mostly by discovering new markets and adapting organizations, not by inventing new technologies. Innovation in markets and organizations, like any innovation, is risky. A risky venture that unites capital and new ideas poses a problem of trust: the investor must trust the innovator not to steal his money, and the innovator must trust the investor not to steal his ideas. If institutions supply the means for entrepreneurs to solve the double trust dilemma, the economy strides ahead through innovation. Conversely, if institutions fail to supply the means for entrepreneurs to solve the double trust dilemma, the economy hobbles along without improvement. According to our theory, the best solutions to this double trust dilemma emerge from an institutional framework that makes private law (property and contracts) and business law (corporations, finance, bankruptcy) effective. The origin of a nation’s laws – whether common or civil law – is not so important as the ability to adapt law to business innovations.

Table 1 summarizes our schematic history of development economics. In Part IV below we provide some details about the constituent theories.

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11 In general, our theory of innovation draws heavily on Joseph A. Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, trans. by Redvers Opie (Cambridge, MA: Harvard University Press, 1934), especially Schumpeter’s idea of entrepreneurs creatively disrupting equilibria. Schumpeter distinguished a new good, a new method of production, a new organization, and a new market. These categories resemble ours. However, we omit his fifth type – new sources of raw materials – because, unlike ideas, resources are exhaustible.
IV State-led growth: Great awakening or socialist siesta?

Why did state-led growth originally dominate development economics? Two historical developments prompted admiration for state leadership among developing countries and their elites. First, almost a century of economic growth ended in the Great Depression of the 1930s, which crippled the world’s capitalist economies and prompted scepticism about free markets and free trade. Second, as capitalism sputtered, many people thought they saw vibrant economic growth in Communist Russia and Nazi Germany. The Soviet Union achieved high growth with state-enforced industrialization and with little international trade. After World War II ended, Communism triumphed in China and other countries tried their own version of Soviet socialism. The newly independent countries of Africa and Asia implemented socialism to various degrees, as illustrated by Jawaharlal Nehru’s India and Kwame Nkrumah’s Ghana. In South America, Juan Perón restructured Argentina’s economy through government planning, and Francisco Franco pursued a similar policy in Spain.

In this political environment, development economics emerged as an academic discipline. In the 1940s and 1950s, many of its prominent scholars taught that developing countries need state leadership of the economy. In 1957 Nobel Prize winner Gunnar Myrdal succinctly summarized the wisdom of the age:

The most important change in state policies in underdeveloped countries is the common understanding that they should each and all have a national economic development policy . . . . Indeed it is also universally urged that each of them should have an overall, integrated national plan. All underdeveloped countries

are now attempting to provide themselves with such a plan, except a few that have
not yet been reached by the Great Awakening.13

Was state-led growth the great awakening or the socialist siesta? To answer
this question, we will briefly review and critique its major schools of
thought. Any introductory textbook on microeconomics explains the funda-
mental idea behind state-led growth. Students first learn the model of
perfect competition, which textbooks describe as a self-regulating system.
Next they learn about departures from perfect competition that cause
markets to fail, beginning with monopoly. Monopoly occurs naturally
when increasing returns to the scale of production cause the largest
firm to have the lowest production costs. With natural monopoly, only
one firm can survive in free competition. Similarly, oligopoly occurs natu-
really when the minimum efficient scale of production is large relative to
the market. With natural oligopoly, only a few large firms can survive in
free competition. Unlike self-regulating competition, natural monopoly
and oligopoly may require regulation or other forms of state control,
although economists disagree about how much they require.

If natural monopoly and oligopoly occur equally in developed and devel-
oping countries, then solving them requires similar amounts of government
control of the economy. However, if natural monopoly and oligopoly are
more pervasive developing countries than in developed countries, then
developing countries require more government control of the economy.

Pursuing different aspects of this idea produced several schools of
thought in development economics that all favour state economic leader-
ship, as we will explain. The school of ‘unbalanced growth,’ which is associ-
ated with Paul Rosenstein-Rodan, held that firms have increasing returns to
scale; to be viable, each firm in the modern sector must reach a minimum
size. Private firms in developed countries already exceed the minimum effi-
cient scale, according to this theory, whereas firms in developing countries
remain below it. Unprofitable companies in developing countries would
allegedly turn profitable if they got bigger. Since private capital markets
in developing countries will not finance the growth of firms sufficiently
to make them big and profitable, the state should subsidize domestic com-
panies and protect them from foreign competition until they reach the
minimum efficient scale to compete internationally, at which point subsi-
dies and protection can be removed – or so the theory goes.

An influential idea that complemented ‘imbalanced growth’ is the ‘big
push.’ A cluster of interdependent firms must reach the minimum effi-
cient scale all at once in order to make an industry viable. To illustrate,
an automobile manufacturer and its supplier of tires may need to reach

13 Gunnar Myrdal, Economic Theory and Under-Developed Regions (London: Duckworth,
1957) at 79 [Myrdal, Economic Theory].
minimum efficient scale at the same time in order for either of them to compete in the world market for cars. Linkages among firms require all of them to get big at once, so development requires a ‘big push.’ The required amount of capital is too large for capital markets to instigate the big push; instead, the state should create an investment board or a state monopoly to direct capital to promising industries.

Like the Big Bang theory in physics, the big push in development reverberates to this day. The contemporary United Nations Millennium Project presumes that African nations south of the Sahara need to stand on massive foreign investments in order to reach the first rung on the growth ladder and begin their ascent. The project calls for doubling or tripling foreign development assistance to Africa and foresees eventually wiping out poverty. This rationale contradicts statistical studies finding little or no effect of development assistance on economic growth. Further, instead of being trapped, some very poor countries in Africa and elsewhere have enjoyed periods of fast and sustained growth.

Like the ‘big push,’ the school of ‘balanced growth’ associated with A.O. Hirschman and Gunnar Myrdal starts by observing that economies of scale in developing countries produce spillovers up and down the chain of supply, so each firm that buys inputs or sells outputs conveys benefits to other firms. The market prices at which the firms trade with each other undervalue these ‘forward and backward linkages.’ The

14 See P.N. Rosenstein-Rodan, ‘Problems of Industrialization of Eastern and Southeastern Europe’ (1943) 53 Econ.J. 202–11. Harvey Leibenstein took a similar view when he asserted that self-sustained industrial growth first requires state assistance to assure ‘critical minimum effort’: Harvey Leibenstein, Economic Backwardness and Economic Growth (New York: John Wiley, 1957). Note that big push theory resembles Marx’s concept of ‘primitive accumulation,’ which played an important role in debate over industrialization in the Soviet Union. The modern industrial sector, according to Karl Marx, Capital: A Critique of Political Economy, trans. by Samuel Moore & Edward Aveling (New York: Modern Library, 1906), must achieve a minimum size before it can exist on its own. Capitalists financed the original accumulation of machines, buildings, railroads, and so on by stealing wealth from the guilds, peasants, and others in the traditional sector, not by retaining profits from their own production. In order to achieve ‘primitive accumulation,’ the Soviet state extracted resources from the traditional agricultural sector to finance the industrial sector.

15 See Goal 8 of the United Nations Millennium Project, online: UN <http://www.unmillenniumproject.org/goals/gti.htm#goal8>.

16 William Easterly, The White Man’s Burden: Why the West’s Efforts to Aid the Rest Have Done So Much Ill and So Little Good (New York: Penguin, 2006).


private benefits of production in linked industries fall short of their social value, so industries in free markets will not expand enough. To solve the problem, the state should choose promising industries and favour them with subsidies and regulations that shield them from competition. State leadership is necessary to balance growth, but a big push is not.

Having discussed economies of scale and scope in developing nations, we apply these ideas to international trade. Given economies of scale, the largest firm or firms in international trade enjoy natural monopoly because they can produce at lower costs than their competitors. This natural advantage comes from the historical accident of getting big first, not from the inherent strength of these firms. The largest firms in international trade in the 1930s and 1940s were those in the rich countries that industrialized first. This accident of history has given these firms monopoly power in international trade.

With free trade, the large firms in developed countries will drive out the small firms in developing countries. If developing countries allow free trade, their domestic firms will never become big enough to compete internationally. To catch up, according to this argument, developing countries should reject free trade and protect their ‘infant industries’ while their firms grow up big and strong. Thus many authors writing on international trade and development advised poor countries to use tariffs to block imports. As domestic industries grow behind the tariff wall, consumers will substitute domestic goods for imported goods. Import substitution makes domestic firms get bigger, which causes their costs of production to fall. This process should proceed until domestic industries reach an efficient scale where they can compete internationally, at which point the state can remove international trade protection.

Hans Singer and Raul Prebisch also thought that poor countries that primarily export raw materials will stay poor. Exporting raw materials is a trap, because the prices of raw materials would always fall relative to those of manufactured goods. As these prices fall with time, the poor countries that mostly export raw materials will get poorer. (This

21 Specifically, demand for raw materials is inelastic, according to Prebisch, so an increase in their supply from developing countries would cause a decline in their world prices. Thus the terms of international trade always turn against exporters of raw materials. So developing nations should not focus their economy on exporting raw materials. In addition, random shocks in supply combined with price inelasticity causes large price fluctuations, which disrupt economies. So a government board should be created to smooth out world price fluctuations. See Hirschman, Strategy, supra note 18; Myrdal, Economic Theory, supra note 13. See also H.W. Singer, ‘The Distribution of
prediction contradicts the belief among contemporary ecologists that prices of raw materials will rise sharply as a result of resource exhaustion.

While Prebisch favoured temporary tariff protection against international competition, radical trade sceptics favoured permanent protection. Radical sceptics held that poor countries with small industries could never compete in international trade. By trying to do so, they would become the poor ‘periphery’ far from the rich ‘centre’; even worse, if they allowed direct foreign investment, international firms would exploit them. Exploitation of poor countries by rich countries was central to Lenin’s theory of imperialism. To avoid exploitation by imperialists, some contemporary critics of globalization believe, poor countries should curtail their participation in the international economy.22

Besides spillovers and trade scepticism, another reason for developing countries to subsidize domestic firms comes from a different strand of thought in development economics. According to W. Arthur Lewis’s ‘dual economy’ theory, developing economies have two distinct sectors – modern and traditional.23 Each worker in the traditional sector produces little because he has so little to work with (e.g., digging with a hand shovel). In contrast, each worker in the modern sector produces a lot because he has much to work with (e.g., digging with a power shovel). According to this view, when workers move from the traditional to the modern sector, production falls a little in the traditional sector and increases a lot in the modern sector.

To illustrate concretely, a farmer employs his son to work the family’s small plot of land. There are so many workers and so little land that the son’s labour does not produce much. The father pays his son a subsistence wage that exceeds his son’s production, so the son receives a subsidy in the form of a gift from his father. In these circumstances, if the son leaves the farm, moves to the city, gets a factory job, and supports himself, the son’s income will increase and so will the father’s income.24


22 V. I. Lenin, leader of the Communist revolution in Russia that began in 1917, argued that rich and poor countries stand in the same relationship to each other as the capitalists and the workers in Marx’s theory: the former exploit the latter.


24 The same argument held when a pre-capitalist feudal landlord under the noblesse oblige rule guaranteed a subsistence income to his serf independent of the serf’s marginal productivity of labour.
We will mention the most important policy implication of dual market theory. According to this theory, society benefits when employment shrinks in the traditional sector and increases in the modern sector. Free markets will not capture this benefit, so the traditional sector tends to be too large and the modern sector tends to be too small. To correct this distortion, the state should tax the traditional sector and subsidize the modern sector. This argument justifies policies that transfer resources from poor workers in agriculture to relatively rich workers in industry. In the 1980s, developing countries everywhere (except in East Asia) discriminated against agriculture by using regulatory price ceilings, export restrictions, and multiple exchange rates. As a result, farmers in developing countries received less than the world price for their crops. This is a recent episode in the ancient history of towns taxing farmers. (In rich democracies today, the situation usually reverses itself: towns subsidize farmers.)

25 To generalize, dual economy theory holds that the traditional sector sets wages more like a family than like a market. Each worker in the traditional sector receives a subsistence wage that depends on the average product per worker, not the marginal product. When a worker moves from the traditional sector to the modern sector, the remaining workers in the traditional sector benefit. Specifically, they benefit by the difference between the traditional worker’s average and marginal product. In contrast, competition in the modern sector causes a worker’s wage to equal his marginal product.

26 Another policy implication that we do not discuss concerns evaluating investment projects. The World Bank and national development agencies often apply cost–benefit analysis to investment projects in poor countries. According to dual economy theory, cost–benefit analysis should assign little cost to labour drawn from the traditional sector. This accounting practice prices labour below prevailing wages, which makes projects undertaken by the World Bank and national development agencies seem more valuable. In reality, migration from the traditional to the modern sector depends on wage differentials between them; with free migration, the shadow wage in the traditional sector approximately equals the market wage in the market sector. See Raaj Kumar Sah & Joseph E. Stiglitz, ‘The Social Cost of Labor and Project Evaluation: A General Approach’ (1985) 28 J.Pub.Econ. 135.

27 For a table showing the depression of prices paid to farmers relative to world prices for the main staples in fifty developing countries see Daphne S. Taylor & Truman P. Phillips, ‘Food-Pricing Policy in Developing Countries: Further Evidence on Cereal Producer Prices’ (1991) 73 Am.J.Agric.Econ. 1036.

28 In 1756, in the famous Diderot Encyclopedia, François Quesnay criticized this feature of mercantilist France as follows: ‘Wrong promises have drawn people from the countryside into the cities, where the necessity to offer cheap labor led to political pressure on the price for wheat. . . . (This) has knocked down agriculture into a miserable state of subsistence. François Quesnay, ‘Grains’ in Encyclopédie de Diderot et d’Alambert (1757) [translated by authors].

29 A possible explanation is that farm subsidies in rich countries, where farmers are few, benefit relatively few people, so they can overcome free-riding and devote resources to influencing politicians. Conversely, farm taxes in poor countries, where farmer are
Table 2 summarizes the theories we have discussed. Responding to these theories, the state led the economy in many developing countries through licences, subsidies, tariffs, loans, manipulated exchange rates, and official prices. State-led growth produced impressive results in the 1950s, but its failure became obvious in some countries in the 1970s.30 Lack of competition raised prices and lowered the quality of goods, overregulation stifled innovation and promoted corruption, and state domination of the economy channelled effort into gaining political influence rather than creating wealth. To illustrate, when Juan Perón achieved power in Argentina in 1946, he taxed agriculture, subsidized industry, and erected tariff barriers against foreign goods. By so doing, he wrecked agriculture and created industries that could not compete in world markets.31 In Ghana, during the reign of Kwame Nkrumah (1957–1966), a similar policy redistributed wealth and power from cocoa farmers to urban elites.32 Tanzania under Julius Nyerere (1960–1986) also pursued this strategy. While import substitution failed, export-led growth succeeded dramatically in Japan, South Korea, and Taiwan.

We have focused on economic organization and performance, but state-led growth also affects class and ideology, as we describe briefly. In past centuries, aristocrats in Europe despised businessmen; for aristocrats, ‘bourgeois’ was a pejorative term. Much the same was true among the higher castes in India. In the twentieth century, this hostility to business transferred from aristocrats and high castes to intellectuals. Aristocratic

<table>
<thead>
<tr>
<th>Name</th>
<th>Proponent(s)</th>
<th>Policy</th>
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<tr>
<td>Big push</td>
<td>Rosenstein-Rodan</td>
<td>State mobilizes capital and labour</td>
</tr>
<tr>
<td>Balanced growth</td>
<td>Hirschman &amp; Myrdal</td>
<td>State subsidizes promising industries</td>
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<td>Import substitution</td>
<td>Prebisch</td>
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<td>Imperialism</td>
<td>Lenin</td>
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<tr>
<td>Dual economy theory</td>
<td>W.A. Lewis</td>
<td>Subsidize industry and tax farms</td>
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numerous, impose small costs on many people, so they cannot overcome free-riding and devote resources to influencing politicians.


31 Note that Perón’s policies in Argentina and their consequences resemble the mercantilist in eighteenth-century France whom Adam Smith criticized.

snober
ty toward bourgeois culture was transmuted into intellectual anger
toward capitalism.

The hostility of intellectuals toward business has a material foundation.
Before the twentieth century, many intellectuals lived off the largesse of
aristocrats and shared their conservative views. Building modern states
in the twentieth century, however, required developing a civil service
that hires and promotes on relatively objective grounds, including edu-
cation. Intellectuals perform well in school and on the written exams
that the civil service uses for hiring and promoting. By providing jobs,
the civil service broke the dependence of intellectuals on aristocratic lar-
gesse. To illustrate, the great sixteenth-century Danish astronomer Tycho
Brahe was the imperial astronomer for Holy Roman Emperor Rudolph II,
whereas the twentieth-century physicist Albert Einstein first developed his
revolutionary ideas on relativity while working as an examiner in the Swiss
patent office in Berne.

Having become entrenched in the civil service, intellectuals obviously
gained from expanding it. Administration expands dramatically with state
control of the economy; leading the economy created more jobs with
higher pay for intellectuals. Intellectuals were naturally attracted to the
belief that the state should lead economic growth. Shouldn’t the smartest
people at school also be the richest and most powerful? As the civil
service grew, left ideology made state officials confident that they could
lead the economy. Thus ideas and material interests converged to
promote state leadership of the economy.

V Why liberalization?

We have explained that state-led growth relied on planners to direct capital
to the most promising industries and to protect them from foreign compe-
tition. In the last half of the twentieth century many developing countries
pursued industrial policies that favoured capital accumulation over con-
sumption, manufacturing over agriculture, heavy industry over light indus-
try, dirty industry over clean industry, fishing and cutting wood over
sustainable production, and import substitution over exports. From
Poland to India, state-led growth nurtured firms that were too clumsy to
survive. Import substitution in Africa and South America produced much
worse results than export-led growth in East Asia. With subsidies and protec-
tion, helpless infant industries grew into flabby adolescents. Most economists
now view these policies as mistakes that retarded economic growth.

The failure of the policies of state-led growth has three general causes.
The first is motivation. Public officials cannot keep the wealth that their
policies create for the nation, but they can keep the wealth they receive in
salaries and bribes. By leading development, officials increase their
responsibilities, which increases their salaries and their opportunities to
collect bribes. Industrial policy is rife with political favouritism, chicanery, cronysim, and corruption. Politicians and officials have strong incentives to invest the state’s money less productively than businessmen invest their own money.

The second cause of failure is lack of information. Even if officials were motivated to make wealth for the nation, they do not have the information necessary to guide industrial development. An economy produces everything from pins to powerhouses; state officials cannot centralize enough information to manage this complexity. People in firms distort or withhold information from officials for strategic reasons – to avoid taxes, to attract subsidies, to gain political influence, and so on. Strategic resistance to officials makes the latter’s task of economic leadership intractable. Note that the arguments against state-led growth based on information and motivation were made in the 1940s, but economists appreciated them more fully in the 1980s after developing the underlying formal models.

The third cause of failure is the impotence of capital accumulation. On its face, capital accumulation may seem like the key to unlock the treasure chest of national wealth. On construction sites in Germany, machines resembling dental drills for dinosaurs bore the foundations of buildings, and other machines carry away the dirt without human hands touching it. With so much capital per worker, the productivity of German labour is high. In contrast, on construction sites in India, labourers with picks and shovels dig the foundations of some buildings and women remove the dirt in baskets balanced on their heads. With so little capital per worker, the productivity of Indian labour is low.

Why do Indian workers have less capital? In a market economy, households decide how much money to save and businesses decide how many machines to buy. People in poor countries voluntarily save a lot of money. Could a country like India grow faster and become rich like Germany by forcing people to save and invest more? Russia tried to speed development in the 1940s and 1950s by forcing people to save more and investing their savings in machines and other capital goods. Growth rates were spectacular in the 1950s, but they proved

33 Two of the seminal works were published in 1944: Abba P. Lerner, *The Economics of Control* (New York: Macmillan, 1944), and Friedrich A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944).
34 Recognition of this fact especially came through the 2001 Nobel Prize award to three pioneers in the area, Michael Spence, George Akerlof, and Joseph Stiglitz.
35 In recent years, people in low-income countries have voluntarily saved a larger fraction of their income than people in high-income countries. In general, people save more when they have to pay for their own retirement and medical treatment than when the state provides social security and medical care. See World Bank, *World Development Indicators 2007* (Washington, DC: World Bank, 2007), online: World Bank <http://go.worldbank.org/3JU2HA60D0>.
unsustainable. The facts about Russia are consistent with the \textit{law of diminishing marginal productivity}, which predicts that total production increases at a decreasing rate in a firm or nation as capital increases relative to other factors of production.

In general, economists who examine the data find a weaker connection between growth and capital accumulation than theories of state-led growth assumed. To illustrate, in 1960 capital per capita was three times higher in the relatively rich United Kingdom than in relatively poor Algeria. Over the next twenty-eight years, capital increased by roughly 240 per cent in the United Kingdom and real income per capita increased by more than 80 per cent, whereas capital per capita increased by roughly 300 per cent in Algeria and income per capita stagnated. Capital accumulation brought higher incomes to Britain but not to Algeria. Algeria is not the only example of capital accumulation without growth.

In the United Kingdom, capital accumulated and the productivity of capital did not fall, defying the law of diminishing marginal productivity.


\textsuperscript{37} A well-run company first acquires machines that boost output the most, and later acquires machines that boost output less. So the gain in output from new machines declines as a company gets more of them. This proposition predicts that capital will be more productive on average in countries with less capital. Equivalently, poorer countries will have a higher ratio of output to capital than rich countries. In symbols, assume \( Y = f(K, L) \) where \( f_1 > 0, f_{11} < 0, \) and \( 0 = f(0, L). \) As \( K \) increases, \( Y \) increases and \( Y/K \) decreases.


\textsuperscript{39} Between 1980 and 1992, capital per capita increased by more than 1 per cent per year in Costa Rica, Ecuador, Peru, and Syria, while per capita GDP decreased. W. Easterly & R. Levine, ‘It’s Not Factor Accumulation: Stylised Facts and Growth Models’ (Central Bank of Chile Working Paper No. 164, 2002) at 10 [Easterly & Levine, ‘Not Factor Accumulation’]. Between 1980 and 2004, average per capita growth rates in high-income countries were 1.93 per cent per annum, compared to 1.97 per cent per annum in low- and middle-income countries. Note, however, that the experience of Tunisia in this period resembled Britain’s more than it resembled that of its neighbour Algeria. In Tunisia the capital output ratio was slightly higher than in Algeria in 1960, and the capital stock per capita was then about half of what it was in Algeria. Between 1960 and 1988 the per capita capital stock in Tunisia increased by about 70 per cent, and Tunisia experienced a real per capita growth of about 40 per cent over the twenty-eight-year period. The capital output ratio decreased substantially during the same period. King & Levine, \textit{Capital}, supra note 38.

\textsuperscript{40} The ratio of output to capital measures capital’s productivity. The capital: output ratio changed little in the United Kingdom as capital accumulated and income increased. See King & Levine, \textit{Capital}, supra note 38.
In UK firms, innovation apparently increased the productivity of capital enough to offset the decrease caused by having more of it. While capital accumulation proved less important to growth than many supposed, innovation proved more important.\(^{41}\) Conversely, bad organization and leadership of Algerian firms apparently caused them to waste increasing amounts of capital.\(^ {42}\) Developing countries apparently cannot accelerate growth by importing modern machines and placing them in inefficient organizations. The state can make people accumulate more easily than it can make them innovate.

Development economics turned away from state-led growth and toward liberalization when the ‘Washington Consensus’ emerged in roughly 1980.\(^ {43}\) The retreat of state ownership measures the influence of development economics on state policies. Table 3 distinguishes four groups of countries by income level, from low to high. In each group of countries, the percentage of GDP supplied by state-owned enterprises declined between 1980 and 1999, indicating a worldwide trend toward privatization. However, the percentage declined the most in low-income countries. In 1980 low-income countries produced relatively more in state-owned enterprises than high-income countries did, whereas in 1999 low-income countries produced relatively less in state-owned enterprises than did high-income countries.

Another indicator of state leadership’s decline and liberalization’s ascent is the shift from government development assistance to private investment in developing countries. In 1950, private direct investment in developing countries (credits and equity) was much smaller than government development assistance (‘foreign aid’). In 1970, development assistance to low- and middle-income countries was still twice the

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\(^{41}\) In general, an increase in an economy’s output per worker can be decomposed into the amount caused by increases in capital per worker, more education of workers, and a residual that represents better organization and other unmeasured changes. Thus Easterly and Levine, who analysed the growth of income per capita for sixty countries between 1960 and 1992, found that more capital and more education explained roughly 40 percent of the growth, leaving 60 per cent unexplained. In their study, immeasurable variables such as better organization caused most growth. Easterly & Levine, ‘Not Factor Accumulation,’ supra note 39.

\(^{42}\) If better organizations accumulate more capital, then organizations with more capital per worker will use it more productively. This hypothesis predicts that capital will be less productive on average in countries with little capital than in countries with more capital; in other words, poor countries will have a lower ratio of output to capital than rich countries. This is the exact opposite of the law of diminishing returns. In symbols, assume \(Y = f(Ke, L)\), where \(f_1 > 0\), \(f_{11} < 0\), and \(e > 0\). As the organization increases the efficiency \(e\) with which it uses capital, the output capital ratio increases: \(\partial Y/\partial Ke > 0\).

amount of net private direct investment ($6.3 billion vs. $2.9 billion). By 2007, private direct investment had increased to $522 billion and development assistance to $105 billion. Unfortunately, international investments in stocks still concentrate in a few countries, especially ‘portfolio investment’ (shares purchases by corporate outsiders who do not participate in managing the company). Among developing countries, more than 80 per cent of all net portfolio investment went to China, India, Turkey, Brazil, and South Africa. In some of the poorest countries, uncertain property rights cause people to seek the best protector of their funds, so more capital flows out than in.

We can compare the history of liberalization to actual growth rates. Liberalization and growth correlated positively in some countries. Thus the pace of economic growth quickened with liberalization in East and South Asia in the 1980s, and in Central Europe in the 1990s. Liberalization and growth correlated negatively in other countries. Production plummeted after 1990 when liberal reforms demolished planning in Russia, Eastern Europe, and other countries of the former Soviet Union; in the 1980s, Latin America liberalized and stagnated, compared

<table>
<thead>
<tr>
<th>Countries (by income group)</th>
<th>1980 (%)</th>
<th>1999 (%)</th>
<th>Change (± %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income countries</td>
<td>15</td>
<td>2.5</td>
<td>−12.5</td>
</tr>
<tr>
<td>Lower-middle-income countries</td>
<td>11</td>
<td>4</td>
<td>−7</td>
</tr>
<tr>
<td>Upper-middle-income countries</td>
<td>10.5</td>
<td>4</td>
<td>−6.5</td>
</tr>
<tr>
<td>High-income countries</td>
<td>6</td>
<td>4</td>
<td>−2</td>
</tr>
</tbody>
</table>


46 For data on growth rates by region and country see Cooter & Schaefer, *Solomon’s Knot*, supra note 1 at c. 2.
to modest growth in previous years of state activism. Figure 1 summarizes this schema.

Why did the same policy of liberalization have different consequences from one country to another? The same policy gets different results when implemented with different institutions in the background—much like proposing a toast with wine in Catholic Spain versus Muslim Iran. To succeed, liberalization requires background institutions that secure property for the makers of wealth, enforce promises in business, and distribute the profits of firms predictably. These institutions are what we mean by effective property, contract, and corporate law, as represented in Figure 2.

A country achieves effective property, contract, and corporate law through the interaction of social norms, courts, the civil service, and politics, which different countries combine in different proportions. The form of protection varies from one country to another. Courts, state law, and constrained government provided protection in some countries in Central and Eastern Europe, such as Poland and Bulgaria, after 1990; these countries dramatically improved their legal institutions in an effort to join the European Union. In other countries, the state bureaucracy, intermediate institutions, and authoritarian leaders provided protection of property, contracts, and business organizations, as in Taiwan, South Korea, China, and Vietnam. In the 1990s, India relaxed state planning and liberalized cautiously in phases. Growth accelerated as stagnant state industries made way for vibrant new businesses such as computer


49 Rodrik, ‘Goodbye Washington Consensus,’ supra note 17 at 979, summarizes his research results as follows:

The cross-national literature has been unable to establish a strong causal link between any particular design feature of institutions and economic growth. We know that growth happens when investors feel secure, but we have no idea what specific institutional blueprints will make them feel more secure in a given context. The literature gives us no hint as to what the right levers are. Institutional function does not uniquely determine institutional form.

software and outsourced services. Indian state planners, who failed to foresee the success of these businesses, did little to inhibit or stimulate their development, much as US government officials did little to inhibit or stimulate Silicon Valley.

Conversely, liberalization succeeded less in countries without effective private and business law. Big-bang liberalization in Russia in the early 1990s led to gangster capitalism and economic decline. In sub-Saharan Africa, lawlessness devastated economies and caused negative growth. In Latin America, liberal reforms without institutional improvements caused economic stagnation.

**VII Conclusion**

To unite ideas with capital and produce growth, business needs freedom through law. Recent history suggests that freeing markets causes growth in states with effective private and business law. This fact leads to our prescription for growth, as depicted in Figure 3.

According to this prescription, the state’s first role in economic development is to build the legal foundations for markets where innovation will flourish. The state should take an indirect approach to promoting growth by providing a legal framework for innovation and competition. The state should not take the direct approach of choosing firms and industries to receive subsidies and other privileges.

In making economic policy, the state should rely mostly on public information. When officials decide by using public information, they can explain and justify their policies to citizens. Public discussion, debate, and criticism create a basis for accountability that dampens nepotism, favouritism, and corruption. Conversely, state officials can easily divert secret investments to their cronies. Politicians mostly direct public money to their supporters in order to build loyalty, however much they may talk about economic growth. Citizens in most democracies, therefore, require officials to base economic policies on public information.

When using public information, state officials cannot predict the surge of a particular firm or industry. People who invest in innovative ideas keep many secrets in order to earn extraordinary profits. Like football teams, firms constantly surprise outsiders, including economists and government officials. To illustrate, economists did not predict the invention of the personal computer by IBM in 1981, the explosive growth of this industry subsequently, or IBM’s exit from personal computers in 2005 by selling this business to the Chinese firm Lenovo. Similarly, Japanese planners did not predict the surge of automobile manufacturers after 1960, and Indian planners did not predict the surge of computer firms in Bangalore after 2000. Most state officials cannot accelerate growth by

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52 To illustrate, inflation-adjusted oil prices increased sharply from the mid-1970s until 1980, then fell back to the previous low levels, where they remained until turning up again in 2002. Whereas public officials predicted a sharp rise in oil prices, they remained stable for twenty years. US politicians, however, used the prediction of rising oil prices to justify subsidies for private companies to construct and operate plants to extract oil from shale. The plants were uneconomical at current prices, but politicians and state officials predicted that prices would rise enough to justify the investment. In fact, these plants never became economical, and they closed down after the subsidies expired. US taxpayers lost a massive amount of money, and some very large energy companies profited handsomely.
investing public funds in particular firms except by chance, just as most private investors cannot profit by trading on public information except by chance. Industrial policies that allegedly redirect capital to growth industries mostly waste resources without increasing growth rates.

We have stressed the state’s role in developing a legal framework for competition and innovation. This is not the state’s only role, however. In addition, the state must stabilize money and banking, supply public goods (defence, education, public health, social security, poverty relief, environmental protection, etc.), and build infrastructure (roads, water, electricity, telephone lines, airports, harbours, industrial parks, etc.). By building infrastructure, the state channels and coordinates the expansion of business without picking which firms or industries will succeed or fail. Instead of leading, the state has successfully coordinated economic growth in some countries, notably in East Asia.

The technical name for this proposition is the ‘efficient market hypothesis.’ According to the efficient market hypothesis, market prices incorporate all public information, so no one investor can do better than chance when relying on public information. This is the ‘semi-strong’ form of the efficient market hypothesis. You don’t have to accept the semi-strong form of the efficient market hypothesis in order to accept that much business innovation is unpredictable from public information. Consequently, if private investors cannot profit by trading on public information except by chance, public officials are unlikely to do better.

Infrastructure projects often face obstacles that only the state can overcome. To illustrate, developing infrastructure often requires assembling large tracts of land from fragmented private owners. For example, a proposed road may cross land owned by many different people. Voluntary purchase of land to construct the road encounters a fatal problem: owners who hold out by refusing to sell their land can command a higher price. To avoid holdouts, most legal systems allow the state to compel owners of land to sell it. In addition, some forms of infrastructure are natural monopolies. For example, most towns do best with a single grid of electricity wires connecting homes and businesses, a single superhighway system to connect towns, and a few cable systems for Internet and television. Natural monopoly, especially for infrastructure, often requires state participation as owner or, if not as owner, as regulator of the private owner.

Milhaupt and Pistor regard coordination as an important role of the state in promoting economic development. See Curtis J. Milhaupt & Katharina Pistor, Law and Capitalism: What Corporate Crises Reveal about Legal Systems and Economic Development around the World (Chicago: University of Chicago Press, 2008). Thus the best and brightest staff Korea’s Ministry of Finance and Japan’s MITI. In the 1950s and 1960s, MITI coordinated miraculous economic growth in Japan by such methods as pressuring companies to share technological innovations through cross-licensing. Economic experts dispute whether MITI caused rapid growth or whether other forces caused growth and MITI merely participated in it. See M. Yishiro & J.M. Ramseyer, ‘Capitalist Politicians, Socialist Bureaucrats? Legends of Government Planning from Japan’ (Harvard John M. Olin Center for Law, Economics and Business Discussion Paper No. 385, 2002). In any case, investment bankers agree that the period of MITI’s guidance of the economy diminished with time and ended by, say, 1990. A similar history applies to Korea. In contrast, since 1990 Taiwan has grown comparably to Korea and faster than Japan, although Taiwan has no equivalent of Japan’s MITI or Korea’s Ministry of Finance.
Since the state has so many roles, the reader may wonder, ‘Why do you emphasize the institutions of private and business law instead of monetary policy, public goods, or infrastructure? Runaway inflation, endemic illiteracy, epidemics, and unusable roads obstruct development just as much as ineffective private and business law. Why put them in the background and legal institutions in the foreground?’

Our answer in brief – which is all we can supply here – is conceptual. Sustained growth comes from innovation. An economic innovation is the development of a new good to make or a new way to make goods. New goods and new ways to make them come from combining capital with new ideas. Combining capital and ideas requires solving the double trust dilemma. The best solutions involve legal institutions, especially private and business law. If economic theories have power, as Keynes believed, then understanding this analysis of the double trust dilemma should cause policy makers to accelerate growth and alleviate the poverty of nations.