Since 1950, 13 economies have grown at an average rate of 7 percent a year or more for 25 years or longer. At that pace of expansion, an economy almost doubles in size every decade. This report is about sustained, high growth of this kind: its causes, consequences, and internal dynamics.1 One might call it a report on “economic miracles,” except that we believe the term is a misnomer. Unlike miracles, sustained, high growth can be explained and, we hope, repeated.

Growth is not an end in itself. But it makes it possible to achieve other important objectives of individuals and societies. It can spare people en masse from poverty and drudgery. Nothing else ever has. It also creates the resources to support health care, education, and the other Millennium Development Goals to which the world has committed itself. In short, we take the view that growth is a necessary, if not sufficient, condition for broader development, enlarging the scope for individuals to be productive and creative.

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1 It reflects the views of a Commission consisting of 19 well-known and experienced policy, government, and business leaders, mostly from the developing world, and two renowned economists. It was written over two years during which the Commission interacted, consulted with, and learned from leading academics, business leaders, policy makers, and NGOs. The report reflects the learning over this period and is informed by the Commission members’ own experience.
Growth Dynamics and the Global Economy

The report identifies some of the distinctive characteristics of high-growth economies and asks how other developing countries can emulate them. It does not provide a formula for policymakers to apply—no generic formula exists. Each country has specific characteristics and historical experiences that must be reflected in its growth strategy. But the report does offer a framework that should help policymakers create a growth strategy of their own. It will not give them a full set of answers, but it should at least help them ask the right questions. Fast, sustained growth does not happen spontaneously. It requires a long-term commitment by a country’s political leaders, a commitment pursued with patience, perseverance, and pragmatism.

Growth of 7 percent a year, sustained over 25 years, was unheard of before the latter half of the 20th century. It is possible only because the world economy is now more open and integrated. This allows fast-growing economies to import ideas, technologies, and know-how from the rest of the world. One conduit for this knowledge is foreign direct investment, which several high-growth economies actively courted; another is foreign education, which often creates lasting international networks. Since learning something is easier than inventing it, fast learners can rapidly gain ground on the leading economies. Sustainable, high growth is catch-up growth. And the global economy is the essential resource.

The open world economy also offers developing countries a deep, elastic market for their exports. Since the division of labor is limited by the extent of the market, this extensive world demand allows countries to specialize in new export lines and improve their productivity in manifold ways.

Is a turn outward the only route to growth? Some economies have instead looked inward, competing with imports in the home market, rather than competing for foreign custom in the world market. These strategies have occasionally succeeded in spurring investment, increasing the size and efficiency of domestic producers. They also avoid the risks and dislocations of opening up to foreign competition too abruptly. Nevertheless, growth strategies that rely exclusively on domestic demand eventually reach their limits. The home market is usually too small to sustain growth for long, and it does not give an economy the same freedom to specialize in whatever it is best at producing.

Catch-up growth is also made possible by an abundant labor supply. As the economy expands and branches out, new ventures draw underemployed workers out of traditional agriculture into more productive work in the cities. Resources, especially labor, must be mobile. No country has industrialized without also urbanizing, however chaotically.

Economies in high-growth mode are transforming themselves structurally. To quote from the report, “The growth of GDP may be measured up in the macroeconomic treetops, but all the action is in the microeco-
nomic undergrowth, where new limbs sprout, and dead wood is cleared away.” Most growth-oriented policies and reforms are designed to foster this microeconomics of creation and destruction, and, crucially, to protect people who are adversely affected by these dynamics.

Thanks to abundant labor and deep world demand, the speed of growth in the early stages of development is limited primarily by the pace of investment (public and private together). This investment is itself affected by the availability of savings. High-growth economies typically set aside a formidable share of their income: a national saving rate of 20–25 percent or higher, is not unusual. In principle, countries could rely more on foreign capital to finance their investment needs. But capital inflows over the past several decades have a mixed record. Our view is that foreign saving is an imperfect substitute for domestic saving, including public saving, to finance the investment a booming economy requires.

**Leadership and Effective Government**

Successful cases share a further characteristic: an increasingly capable, credible, and committed government. Growth at such a quick pace, over such a long period, requires strong political leadership. Policy makers have to choose a growth strategy, communicate their goals to the public, and convince people that the future rewards are worth the effort, thrift, and economic upheaval. They will succeed only if their promises are credible and inclusive, reassuring people that they or their children will enjoy their full share of the fruits of growth.

Such leadership requires patience, a long planning horizon, and an unwavering focus on the goal of inclusive growth. In several cases, fast-growing economies were overseen by a single-party government that could expect to remain in power for a long period of time. In other cases, multi-party democracies found ways to be patient and maintain a consistent focus over time. Rival political parties can, for example, agree on a bipartisan growth strategy, which they each follow during their term in power. Even if a formal pact is never made, a successful growth strategy, commanding the confidence of the public, may outlast the government that introduced it. Experience suggests that strong, technocratic teams, focused on long-term growth, can also provide some institutional memory and continuity of policy. This stability and experience can be particularly valuable during political upheavals, because new systems of collective decision making can take a long while to bed down and function efficiently.

Just as growth is not the ultimate objective, reforms aren’t either. Both are means to ends. Reforms may be admirable and represent major achievements, but if growth does not accelerate, or if large numbers of people do not feel any improvement in their circumstances, then there is more work
to do. Relying on markets to allocate resources efficiently is clearly necessary (there is no known, effective substitute), but that is not the same thing as letting some combination of markets and a menu of reforms determine outcomes.

Wedded to the goal of high growth, governments should be pragmatic in their pursuit of it. Orthodoxies apply only so far. This report is the product of two years of inquiry and debate, led by experienced policy makers, business people and two Nobel prize-winning academics, who heard from leading authorities on everything from macroeconomic policy to urbanization. If there were just one valid growth doctrine, we are confident we would have found it.

Economists know how markets work, and they can say with some confidence how a mature market economy will respond to their policy prescriptions. But mature markets rely on deep institutional underpinnings, institutions that define property rights, enforce contracts, convey prices, and bridge informational gaps between buyers and sellers.

Developing countries often lack these market and regulatory institutions. Indeed, an important part of development is precisely the creation of these institutionalized capabilities. Even without them, growth can occur, and these institutions can co-evolve with the economy as it expands. However, we do not know in detail how these institutions can be engineered, and policy makers cannot always know how a market will function without them. The impact of policy shifts and reforms is therefore harder to predict accurately in a developing economy. At this stage, our models or predictive devices are, in important respects, incomplete.

It is, therefore, prudent for governments to pursue an experimental approach to the implementation of economic policy. The principle is expressed well by Deng Xiaoping’s oft-quoted dictum to “cross the river by feeling for the stones.” Governments should sometimes proceed step by step, avoiding sudden shifts in policy where the potential risks outweigh the benefits. This will limit the potential damage of any policy misstep, making it easier for the government and the economy to right itself. Likewise, each footfall should represent a small trial or experiment, a “feeling about” for the best way forward.

Making policy is only part of the battle. Policies must also be faithfully implemented and tolerably administered. An effective government apparatus is not built overnight and requires constant attention. A culture of honest public service must be fostered and maintained. The administration must also attract and retain talented people, by offering better pay, promotions, and recognition to officials who can measurably improve the public sector’s performance.

Government is not the proximate cause of growth. That role falls to the private sector, to investment and entrepreneurship responding to price signals and market forces. But stable, honest, and effective government is...
critical in the long run. The remit of the government, for example, includes maintaining price stability and fiscal responsibility, both of which influence the risks and returns faced by private investors.

In recent decades governments were advised to "stabilize, privatize and liberalize." There is merit in what lies behind this injunction—governments should not try to do too much, replacing markets or closing the economy off from the rest of the world. But we believe this prescription defines the role of government too narrowly. Just because governments are sometimes clumsy and sometimes errant, does not mean they should be written out of the script. On the contrary, as the economy grows and develops, active, pragmatic governments have crucial roles to play.

Sustained, high growth is not easy. If it were, the list of successful cases would be longer. Some countries struggle to start growth; others fail to sustain it. Some grow quickly, but reach a plateau when they reach middle-income. A fast-growing economy is a moving target. Bad policies are often good policies applied for too long. And just as a country's growth strategy must evolve with the economy, a country's politics must as well. Prosperity will create a middle class whose voice will need to be recognized in the political process, both locally and centrally.

Having described the art of policy making, we now turn to policy ingredients themselves. The number of desirable reforms and outlays a government might consider at any point of time will vastly exceed its reach and budget. A coherent growth strategy will therefore set priorities, deciding where to devote a government's energies and resources. These choices are extremely important. They should also be country- and context-specific, responding to widely varying initial conditions. This report cannot therefore set priorities for policy makers. It can only identify the policies that need attention.

The policy underpinnings of sustained, high growth create an environment for high levels of investment, job creation, competition, mobility of resources, social protections, equity, and inclusiveness. It would be going a little too far to describe them all as necessary conditions. Our view is that an understanding of the dynamics and a focused attention on the policy foundations will significantly increase the chances of accelerating growth. Conversely, persistent inattention to them will eventually harm it. There are many different recipes for pasta. The precise ingredients and timing are different for each. But if you leave out the salt or boil it too long, the results are distinctly inferior.

**Selected Policy Ingredients**

No country has sustained rapid growth without also keeping up impressive rates of public investment—in infrastructure, education, and health. Far
from crowding out private investment, this spending crowds it in. It paves the way for new industries to emerge and raises the return to any private venture that benefits from healthy, educated workers, passable roads, and reliable electricity.

Unfortunately, we discovered, infrastructure spending is widely neglected. Often it is not even measured. We also found that the quantity of education (years of schooling, rates of enrollment) in many countries was more impressive than the results: literacy, numeracy, and other cognitive skills. Needless to say, it is the results that matter to growth.

Health is of deep value to people, regardless of its impact on growth. Nonetheless, the economic consequences of hunger, malnutrition, and disease should not be forgotten. We wish to highlight one example in particular: if children are undernourished in the womb or in infancy, their cognitive development can be permanently impaired. This reduces their productivity and their ability to benefit from an education. It is also deeply unfair. The rapid rise in world food prices, which has made it harder for poor families to feed themselves adequately, therefore poses a first-order threat to long-term growth. While higher food prices may create long-run opportunities for developing countries, the suddenness of the increase and the inevitable lags in raising supply have produced an emergency in the short term that needs to be addressed.

Growth entails a structural transformation of the economy, from agriculture to manufacturing, from a rural workforce to an urban one. This transformation is the result of competitive pressure. Governments committed to growth must therefore liberalize product markets, allowing new, more productive firms to enter and obsolete firms to exit. They must also create room to maneuver in the labor market, so that new industries can quickly create jobs and workers can move freely to fill them. These reforms are easier to recommend than to enact. If a wholesale overhaul of the labor laws is politically impossible, policy makers should instead seek a pragmatic compromise that fulfills the aspirations of jobseekers and is not vetoed by politically influential jobholders.

While creative destruction is economically natural, it doesn’t feel natural to those displaced in the process. Policy makers should resist calls to protect industries, firms, or jobs, but they should endeavor to protect people. Perhaps the best protections a government can provide are education, which makes it easier to pick up new skills, and a strong rate of job creation, which makes it easy to find new employment. Beyond that, governments should also establish social safety nets—which provide a source of income to people between jobs—and ensure uninterrupted access to basic services. These policies are both ethical and practical. Without them, popular support for a growth strategy will quickly erode.

Economic insecurity is not confined to the developing world. In a number of high-income countries, inequality is rising as median wages stagnate.
The cause of these trends is disputed. But whatever the true culprit, the public tends to blame globalization. As a result, they are increasingly skeptical of the case for an open economy, despite the great gains it brings. The Commission thinks governments should try harder to spread the benefits of globalization more equitably and to protect people from economic dislocation, whatever the cause. Support for an open global economy depends upon it.

The Commission strongly believes that growth strategies cannot succeed without a commitment to equality of opportunity, giving everyone a fair chance to enjoy the fruits of growth. But equal opportunities are no guarantee of equal outcomes. Indeed, in the early stages of growth, there is a natural tendency for income gaps to widen. Governments should seek to contain this inequality, the Commission believes, at the bottom and top ends of the income spectrum. Otherwise, the economy’s progress may be jeopardized by divisive politics, protest, and even violent conflict. Again, if the ethical case does not persuade, the pragmatic one should.

The education of girls provides one strong test of a government’s commitment to equality of opportunity. Many formidable obstacles stop girls from completing their schooling: family financial pressure, lack of safety, even things as basic as inadequate toilet facilities. But if these obstacles can be overcome, the payoff is very high. Educated women have fewer, healthier children, and they have them at older ages. Their children are then more successful in school, largely because they benefit from their mother’s education. Educating girls and integrating them into the labor force is thus one way to break an intergenerational cycle of poverty.

Governments in the high-growth economies were not free-market purists. They tried a variety of policies to help diversify exports or sustain competitiveness. These included industrial policies to promote investment in new sectors, and managed exchange rates, shepherded by selected capital controls and reserve accumulation. These policies are highly controversial. Within the Commission and the broader policy community, there is a wide range of opinion about their benefits and risks. We have tried to set out the rationale for these policies and to identify the potential problems they create. An awareness of both seems important and useful. If they try these expedients, governments should be clear about what they are trying to achieve and be quick to reverse course if the intended results do not materialize. The policies should also be transitory, unless there are compelling externalities or market failures that require their retention. Any profit-seeking activity that needs permanent subsidies or price distortions to survive does not deserve to do so.

The environment has often been neglected in the early stages of growth, leaving air thick with particulates and water contaminated with effluents. We believe this is a mistake, and one that is extremely expensive to fix in the future. The report argues that growth strategies should take account of the
cost of pollution from the outset, even if they do not immediately adopt the toughest environmental standards upheld in rich countries. The report also calls on developing countries to wean themselves off fuel subsidies. These subsidies impose a mounting fiscal burden as energy prices rise, diverting money that would be better spent on neglected public infrastructure. They also skew patterns of private investment in the economy towards smokestack industries and energy-intensive techniques. Finally, these energy subsidies will inhibit the participation of developing countries in global efforts to cut greenhouse gases.

Countries Facing Special Challenges

The countries to whom this report is addressed all share a need for faster growth. But they are not otherwise alike. Some are large, others small; some rich in natural resources, others with nothing but their labor to sell. Some are keen to know how to start growth; others worried about how to recover it. The report identifies four groupings of countries that appear to face particular challenges in generating and sustaining high growth. These are:

1. African Countries: The countries of Sub-Saharan Africa must contend with unhelpful borders, bequeathed by colonialism, and the mixed blessing of unusually rich natural resources. A striking proportion of Africa’s population lives in landlocked countries that under different historical circumstances would probably be provinces of a larger political unit. But Africa’s immediate past is more hopeful. It has grown by 6 percent a year in recent years and its commodity exports are fetching high prices. We look at the steps required to sustain this momentum, focusing in particular on how African countries can raise investment and diversify their exports.

2. Small States: The world economy is dotted with a large number of very small states, where the per capita cost of government and public services is inevitably high. Because of their small size, they have little scope to diversify their economies, which leaves them highly vulnerable to economic shocks. The answers lie in embracing the world economy, forming regional clubs, and outsourcing some government functions.

3. Countries rich in natural resources: Economies blessed with abundant oil, minerals, or other natural resources should be able to invest the “rents” or proceeds at home, raising their growth potential. But the historical experience has most often been the reverse. The pitfalls are well known. Sometimes the state sells extraction rights too cheaply or taxes resource revenues too lightly. Sometimes the money it raises is stolen or squandered by rent-seeking elites and vested interests. When the
money is invested, it is not always invested wisely or transparently. And by providing a ready source of foreign-exchange, natural resources can also reduce incentives for diversifying exports, a predicament known as "Dutch disease." States will improve on this sorry historical record only if they capture an appropriate share of the resource rents; save a judicious amount overseas; and set clear, growth-oriented priorities for absorbing the remainder at home.

4. Middle-income countries: Economies often struggle to maintain their growth momentum as they narrow the gap with high-income countries. As wages rise, they steadily lose their comparative advantage in labor-intensive industries. Eventually those industries fade away. Increasingly, growth must spring from knowledge, innovation, and a deeper stock of physical and human capital. Services also assume a more prominent role in the economic mix. The growth strategies that served an economy well at lower income levels cease to apply. Instead of providing targeted support to labor-intensive sectors, governments must expand higher education to support the growing service sector of the economy. Skills must be upgraded across the spectrum of employment. Otherwise, the disappearance of unskilled manufacturing jobs will leave the less skilled and less educated part of the population stranded without good employment options.

New Global Challenges

Countries embarking on a high-growth strategy today must overcome some global trends their predecessors did not face. These include global warming; the falling relative price of manufactured goods and rising relative price of commodities, including energy; swelling discontent with globalization in advanced and some developing economies; the aging of the world’s population, even as poorer countries struggle to cope with a "youth bulge"; and a growing mismatch between global problems—in economics, health, climate change, and other areas—and weakly coordinated international responses.

Global Warming and Climate Change

Climate change is the quintessential global challenge: the harm greenhouse gases do is not confined to the country that emitted them. Indeed, poorer countries, which have contributed least to the problem, may suffer the most. They may need to take defensive action against the consequences of climate change sooner rather than later. We don’t know how soon. But international contingency plans—to provide help to a country in case of need—are underway and should be speeded up.
Preventing climate change (or “mitigation” as the experts call it) is better than palliating its effects. But how can we cut carbon emissions to safe levels by midcentury while also accommodating the growth of developing countries? At the moment the debate has reached a conceptual impasse.

Technology offers one answer. Advanced economies should promote the creation of new techniques for cutting carbon and saving energy. The world needs to reduce radically the energy- and carbon-intensity of global growth. That is the only way developing countries can grow rapidly without subjecting the world to potentially catastrophic global warming.

Second, global mitigation efforts need to satisfy the dual criteria of efficiency (that is, cutting the most emissions at the least cost) and fairness. In the interests of fairness, advanced economies, which are responsible for most of the problem, should take the lead in setting medium-term targets for cuts in their own emissions.

Many people also argue that developing countries should commit to longer-term, 50-year emissions targets. After all, these countries are responsible for a growing share of gases in the atmosphere. But this, we feel, is the wrong approach. Poor developing countries can make a bigger, quicker contribution by cooperating in cross-border mitigation projects. These projects meet the dual criteria of efficiency and fairness. The cuts are made in poor countries, which is efficient. But the costs are borne by richer countries, which is fair. Beyond this contribution, developing countries also need to improve energy efficiency, import new technologies rapidly, and eliminate energy subsidies.

Convergence in long-term per capita emissions is both feasible and desirable. As countries approach high-income levels, they should be entitled to the same per capita emissions as other advanced economies. These entitlements must be consistent with a safe global level of emissions. This limit is currently estimated to be 14.8 gigatons per year, or 2.3 tons per person. The current global per capita CO₂ emissions are 4.8 tons, about double the safe level.

**Changing Relative Prices**

In recent years, the relative price of manufactured goods has fallen, and commodity prices have risen. The rising price of food has created nutritional emergencies in some countries, which demand an immediate response. Looking forward, countries and international organizations need to be better prepared for sudden jumps in the price of essential commodities. It will be an ongoing feature of the global economy.

There is some evidence that growth in developing countries, particularly China, has depressed the relative price of manufactured goods. This has raised the question of whether the growth strategies outlined in this
report—strategies based on rapid job creation in labor-intensive export industries—will work in the future. We believe they will. With help from experts, we examined the so-called “adding up” problem: if many developing economies expanded their exports of labor-intensive manufactures, would the world market be able to absorb them all? We reached a positive conclusion: the growth of developing countries, at least in the early stages, will not be blocked by further rapid declines in the relative price of manufactured goods, in part because the growth of emerging markets will help fuel future demand.

**Demographics**

It is clear that the world population is aging rapidly, due to dramatically increased longevity combined with relatively low fertility rates. It is also clear that this trend will require many countries, both developed and developing, to change their pension and social security systems, and revise their expectations about retirement. What is not clear is whether aging will cause a slowdown in global growth and a narrowing of opportunities for developing countries. The answer depends on how quickly pension arrangements change and how quickly people adapt their behavior, by retiring later, for example. Timely adaptation will minimize the impact on global growth.

In a significant number of poorer countries, the demographics run directly counter to the global trend: high fertility; reduced longevity in some cases, due to diseases like HIV/AIDS; and an increasingly youthful population. This raises the danger of widespread youth unemployment. To avert this danger, countries need to grow faster. Migration, while not alone sufficient to solve the problem of youth unemployment, would help alleviate it. It would also benefit those host countries with an aging population. Well-managed long-term migration and well-supervised programs of temporary migration for work should be part of 21st century globalization.

**Global Governance**

A number of trends broached by the report demand a coordinated, multilateral response from the world’s economies. These trends include the growing clout of developing countries, international financial spillovers, and the unbalanced and probably unsustainable pattern of saving and spending in the world economy.

Developing countries cannot grow without the support of the advanced economies. In particular, they need access to the open global trading system. They may also need some latitude to promote their exports, until their economies have matured and their competitive position has improved. The
successful completion of the Doha round is substantively and symbolically important.

It will take time to develop a new “architecture” of institutions and rules to govern the world economy. In the meantime there will remain a mismatch between our deep interdependence and our limited capacity to coordinate our regulatory responses. This mismatch will create risks that countries will have to insure themselves against.

The recent success of many big developing countries raises an old question with renewed urgency: are there natural limits to growth? The rising price of commodities suggests that the world’s endowment of natural resources may not easily accommodate the aspirations of poor countries. Likewise, the threat of global warming will grow as the developing world’s industry expands.

We do not know if limits to growth exist, or how generous those limits will be. The answer will depend on our ingenuity and technology, on finding new ways to create goods and services that people value on a finite foundation of natural resources. This is likely to be the ultimate challenge of the coming century. Growth and poverty reduction in the future will depend on our ability to meet it.