DEVELOPMENT ECONOMICS

THEORY AND TOOLS FOR POLICY PROFESSIONALS

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Table of Contents

1. Introduction 2
2. Definitions of development 3
   2.1. Developing countries 3
   2.2. Global income gaps 5
   2.3. Limitations to income-based measures of development 8
   2.4. Multidimensional measures of development 9
3. Development strategies and the role of the state 12
   3.1. Import substitution industrialisation 13
   3.2. Washington Consensus 14
   3.3. Post-Washington Consensus 15
4. Convergence and income growth 16
   4.1. Income measures 16
   4.2. Convergence 19
   4.3. Growth theories 20
5. Population, stability, and growth in special contexts 27
   5.1. Demographics and growth 27
   5.2. Macroeconomic stability and crises 29
   5.3. Special contexts 31
6. Private sector development 34
   6.1. Structural transformation 34
   6.2. Informality 35
   6.3. Product and labour market regulation 36
   6.4. Education and skill development 37
   6.5. Access to finance 37
   6.6. Infrastructure 38
   6.7. Digitalisation 39
7. Governance and institutions 41
   7.1. Corruption 43
8. International trade and investment 45
   8.1. Trade 45
   8.2. Investment 47
9. Poverty and inequality 50
   9.1. Measuring poverty 50
   9.2. Poverty and development 51
   9.3. Measuring inequality 53
   9.4. Inequality and development 54
   9.5 Poverty, inequalities, and climate risks 55
10. Development assistance 57
   10.1. International cooperation on development 57
   10.2. Designing and evaluating interventions 58

1. Introduction

Development is often thought of as being "essential to economics in general",[i] as said by Amartya Sen. Furthermore, the growing importance of developing countries in the global economy, transborder issues, and moral arguments all mean that the challenges of the so-called developing world are not separate from those of the rest of the planet. Despite this, development economics only began to emerge as a distinct discipline in the mid-20th century with the acknowledgment that traditional thinking in economics, which was largely concerned with issues in advanced industrial economies, was poorly suited to the unique contexts of developing countries.

It would be misleading, however, to present the field as a cohesive set of tools or knowledge. Development economics is better thought of as a set of ongoing debates on what should be the priorities, analytical approaches, and policies pursued in understanding and promoting progress in wellbeing. This diversity of ideas can be challenging to navigate but is also valuable in responding to real-world issues. The complexity of challenges faced in developing economies means that simple and one-size-fits-all solutions are unlikely to be of much use. It also means that the field is constantly evolving, with new ideas and information constantly reshaping how we think about the topic. Importantly, there is increasingly recognition of the power imbalances commonly found in discussions on development, aid, and related topics and the need to decolonise development.

This document provides an introduction to some of the most important debates in development economics, centred around how they respond to a few key questions: What is development and how can it be achieved (2. Definitions of development and 3. Development strategies and the role of the state)? What drives income growth (4. Convergence and income growth; 5. Population, stability, and growth in special contexts; 6. Private sector development; 7. Governance and institutions; 8. International trade and investment)? What does development mean for vulnerable groups in developing countries (9. Poverty and inequality)? How is the international community involved in assisting developing countries and what more can be done (10. Development assistance)?

In addition to the discussions and figures in the main text, this document includes definitions of economics terms (in grey boxes), additional information on topics tangential to the main discussion (in blue boxes), and introductions to the use of a few of the most-used online databases on economic development (in green boxes).

2. Definitions of development

The logic and tools of development economics have been applied in a wide range of contexts. Traditionally, the field is concerned with developing regions covering the economies of most of Asia, sub-Saharan Africa, the Middle East and North Africa, Latin America and the Caribbean, and post-communist states in Europe. However, the field is also highly relevant to less-developed regions and marginalised groups in countries that are high income or are otherwise considered to be "advanced" economies.

The question of what we mean when we talk about "development" is far from academic. What countries or economies are considered to be developing and the standards by which we measure development reflect different priorities and imply the need for different approaches. For example, a definition of development that relies too heavily on income – as economists are sometimes accused of doing – is likely to ignore the importance of security, human rights, and a clean environment to the wellbeing of individuals and groups.

Because the definition of development is inherently a political question, there will always be disagreement on this. The definitions presented here are given as examples of some of the most commonly-used and influential ways of thinking about development.

2.1. Developing countries

It is common to talk about "developing countries" or "developing economies", even though there is significant variation in income and living standards within every society, as will be explored further in a later section (see 9. Poverty and inequality). Despite these differences, there are a few good reasons why we use this shorthand. First, inequalities between countries are very large (though they have been declining for some time). Second, it may also be relevant to speak about issues at the country level because national governments are often responsible for designing and implementing policies on the economy, education, health, and other areas that address development concerns (though international forms of governance and local governments also influence these topics, among other actors). Third, and related to the previous point, much of international cooperation (such as trade and investment agreements and development cooperation) occurs between national governments. Finally, data tends to be aggregated at the national level, facilitating analysis at that level.

Policy: The wide range of measures through which governments are involved in the economy and other topics can be collectively referred to as "policies". These include strategies and plans, legislation, and regulation, among other instruments. Economic policy tends to refer to some combination of fiscal policy (government revenues, expenditure, and debt management); monetary policy (the management of interest rates and inflation, especially by central banks); trade policy (on tariffs, non-tariff measures, and international trade agreements); as well as regulation of the domestic economy such as though measures on product, financial, and labour markets.

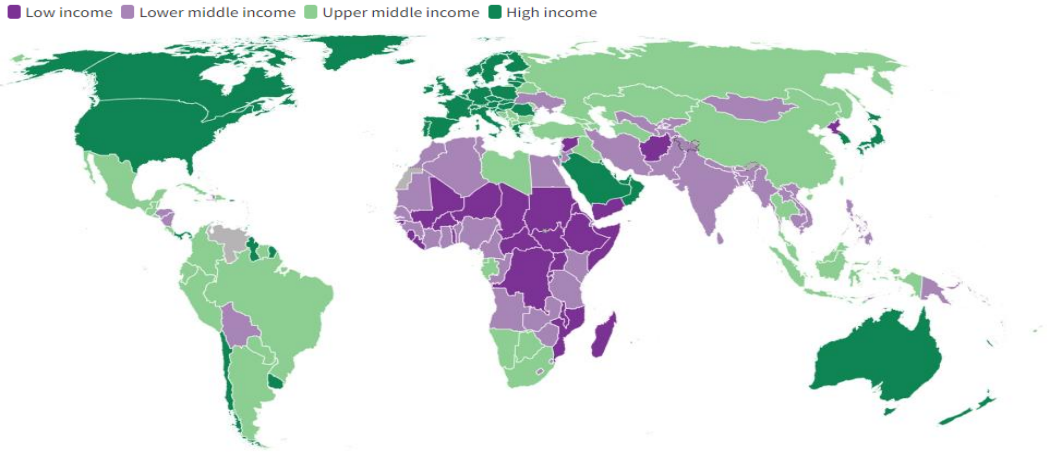
There are many definitions of developing countries or economies, evaluated using different factors or combinations of factors. Typically, these take into consideration some mix of average income in the country, economic stability, human development and social indicators (such as health / longevity or education level), and political factors. Of course, the use of different criteria for determining a country's level of development

results in different lists of what countries can be considered to be "developing". For example, the maps below show how the counties of the world are categorised by three of these approaches – the World Bank's country income groups, the United Nations' list of least developed countries (LDCs), and the Group of 77 – respectively based on income, mixed economic and social development, and political criteria. These overlap considerably, but also include a number of important differences.

A purely income-based measure is the World Bank's classification of country income groups, which is determined using gross national income (GNI) per capita (Figure 1). The thresholds between the categories are adjusted for inflation each year. The 2022 classification uses the following categories for income groups:

- **Low income**: USD 1,135 or less
- **Lower middle income**: USD 1,136 to USD 4,465
- **Upper middle income**: USD 1,466 to USD 13,845
- **High income**: USD 13,846 or more

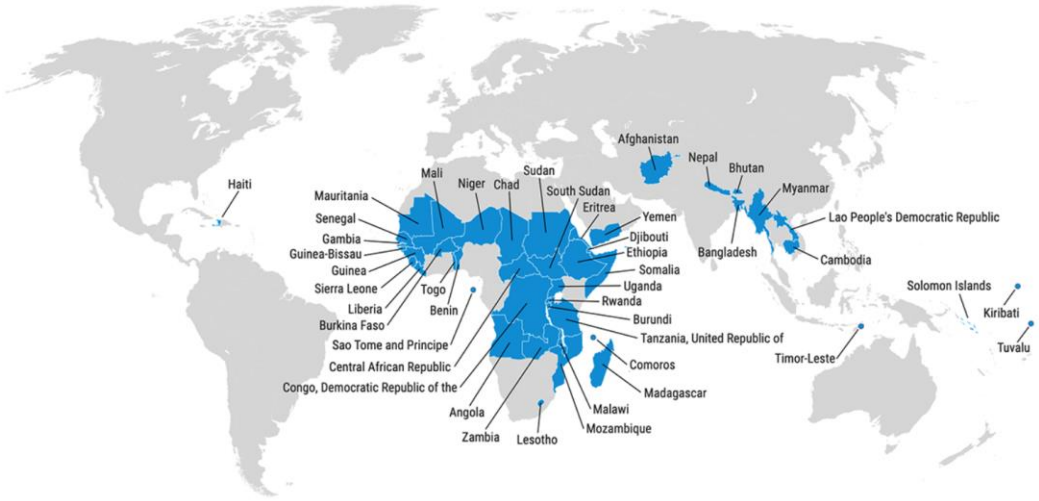
Figure 1. World Bank country income groups, 2022



Source: **World Bank** (n.d). *The World by Income and Region*. World Bank. Washington, D.C. https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html.

The United Nations' list of least developed countries (LDCs) is based on a measure combining per capita income, indicators of social development, and economic vulnerability. In 2022, there were 46 LDCs, 33 of which were in Africa, 9 in Asia, 3 in the Pacific, and 1 in the Caribbean (Figure 2). The LDC classification is a particularly important one because of the concessions given to these countries, including in accessing development financing, preferential market access and special treatment in international trade, access to technical assistance.

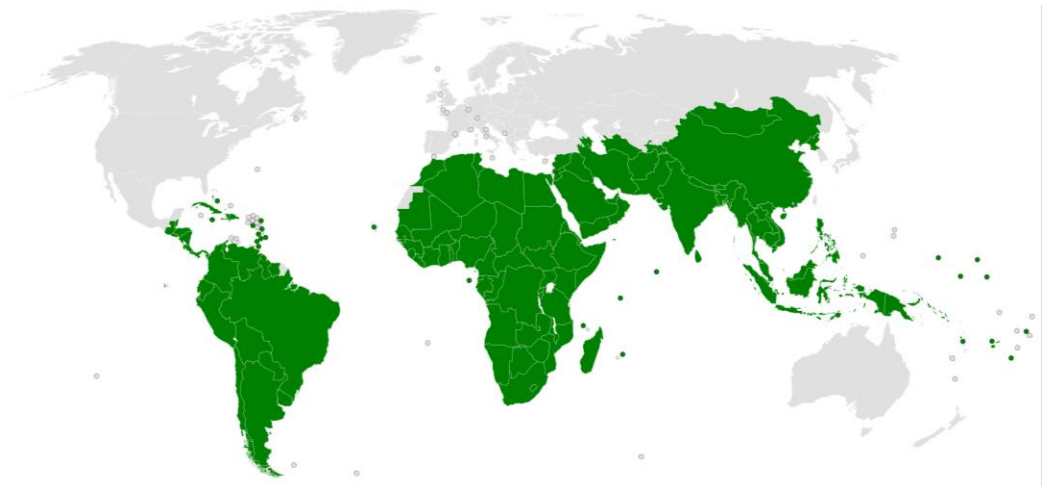
Figure 2. Least developed countries, 2022



Source: **UNCTAD** (2022). *UN List of Least Developed Countries*. UNCTAD. Geneva. https://unctad.org/topic/least-developed-countries/list.

The Group of 77 (G77) is a politically-defined grouping of countries working on development issues (Figure 3). It is a coalition of 134 United Nations member states that cooperate to promote common economic interests. This map shows China as a member and the G77 lists China as a member, though the government of China does not consider itself to be an official member. China nevertheless supports the group and official statements are delivered as in the name of "The Group of 77 and China".

Figure 3. Group of 77 member countries, 2023



2.2. Global income gaps

While per capita income is not the only measure of development, it is often a critical element of any such measure. Higher incomes can permit additional investment in health and education, can support more effective institutions and governance, and can lift

people out of poverty where growth is widely shared. For these reasons, development economics tends to pay particular attention to the question of income growth and global disparities in income.

Global income gaps are very large. Measured in terms of GNI per capita (as is used by the World Bank in its country income classification), average income in one of the world's highest-income countries, Norway, was USD 95,510. This was 245 times greater than the USD 390 average income in Afghanistan, one of the world's poorest countries.

The historical process that led to there being such a large difference between the poorest and richest countries is often referred to as the great divergence.[ii] Rapid growth began in some European countries and the United States, where incomes began to grow in the 19th century. They were followed later by Russia and Japan, which industrialised after these economies. China and India showed similar slow growth until the 1990s, when large-scale investment, economic reforms and productivity growth begin to have an effect on Chinese growth (Box 1). Despite gradual improvements, much of Africa, and large shares of the population in Asia and the Americas are still lagging behind the rest of the world.

Box 1. Productivity measures

Generally speaking, productivity is a measure of how much can be produced with a given set of inputs. Productivity is essential to sustained economic growth and is closely linked to other important economic variables, such as workers' income. The most commonly-discussed forms of productivity are labour, capital and multifactor / total factor productivity:

- **Labour productivity** is calculated as value added (or output) divided by the number of workers or total number of hours worked. It is often affected by the skills of workers and their suitability to the work they are doing, technological change, management practices, and changes in the use of capital and other factors of production. Increases in labour productivity can be a key factor in supporting increased wages and income.
- **Capital productivity** is calculated as value added (or output) divided by the stock of physical capital. It is used in measuring how well physical capital is used in the production process.
- **Multifactor productivity (MFP)** or **total factor productivity (TFP)** is calculated as the ratio of value added (or output) to all factors of production, which are usually defined as labour and capital.

There have long been differences in average incomes around the world, but these were much smaller and only began to grow significantly with the beginning of the Industrial Revolution in the mid 18th century. Before this time, some economies were more productive than others and there were some people that were much wealthier than everyone else, but the vast majority of people around the world were poor by modern standards. Most of the population was comprised of agricultural workers. Opportunities for growth were limited by high rates of capital depreciation stunted investment.

Capital: Capital refers to assets that are used in production but that, unlike inputs or intermediate goods, are not used up in the production process. Physical capital includes equipment, machinery, buildings, and infrastructure. Human capital refers to the knowledge and skills of workers, as well as their health and ability to work. Intellectual property like patents or copyrights can be considered as forms of intangible capital.

Investment: To an economist, investment refers to the use of current resources to purchase capital goods, with the intention of increasing the potential to produce in future. Because there are several forms of capital, investment can include the purchase of physical capital such as new tools, human capital such as through education or training, or intangible capital such as through research.

Depreciation: While capital is not used up in production process, it does not last forever and gradually wears out over time. This decrease in usefulness or progress towards obsolescence is referred to as depreciation.

This changed with the Industrial Revolution. Previously, the energy that could be used in production came almost entirely from human and animal power. New technologies made use of fossil fuels, beginning with coal. While this obviously has had terrible environmental consequences, widespread use of these sources of energy eventually led to the introduction of mass production in manufacturing, replacing small-scale artisanal production. Transportation was transformed as well with the spread of railways and new machinery changed the scale and efficiency of agriculture. These changes led to rising productivity and incomes, beginning in the United Kingdom and spreading to Europe and other early industrialisers, which largely maintained their dominant role in the global economy over the next two centuries.

While the great divergence was kickstarted by the Industrial Revolution, it is debated why this began in Europe and why these early industrialisers grew much faster than other countries for so long afterward. There are many overlapping explanations put forward for this. Some of the more common explanations are related to technology, geography, institutions, and colonialism:

- Technological change over the past three centuries has been unevenly spread around the world, leading to quicker growth and privileged positions in the global economy for the economies that adopted new technologies first. While economic activity relied on energy from human and animal sources for most of history, the Industrial Revolution allowed people to access more energy in the form of fossil fuels beginning in the 18th century. This was followed by the age of steam and railway construction beginning in the early 19th century; steel, electricity, and heavy engineering at the end of 1800s; oil, automobiles, and mass production in the early 20th century; information and communication technologies in the late 20th century; and the ongoing shift to digital technologies.
- Regions that adopted new technologies early on had favourable geography that encouraged this investment. The geographer and historian Jared Diamond, for example, argued that European geography encouraged the creation of countries with incentives to compete against one another economically and militarily.
- Whether or not that was the original intention in their design, rules about the protection of property rights, rule of law, and other foundations of market economies may have provided a basis for growth by encouraging individuals to invest in new economic activity.
- Extractive colonialism based on the exploitation of natural resources from colonies and the active efforts to colonisers to protect their own industry from competition in colonies led to underdevelopment in the latter and to continued power imbalances in the post-colonial era. For example, a famous paper by Acemoglu et al. argues that European colonisers established institutions supportive of growth where more Europeans settled and institutions designed to facilitate resource

extraction elsewhere, and that these institutions persisted (or at least had a lasting influence) after independence and continue to affect the growth prospects of post-colonial countries.[iii]

2.3. Limitations to income-based measures of development

While fostering income growth is a major focus of development economics, per capita income should only be used as a measure of economic progress with consideration of its limitations. Even where measures of income are appropriately adjusted for price level differences across economies and over time (see 4.1. Income measures), differences in income distribution and in the important characteristics overlooked by these measures limit their usefulness in making comparisons.

Inequalities within countries mean that average income per capita does not tell us much about who has what level of income, so we need information about income distribution as well. Countries with relatively high levels of average income can still have high poverty rates. South Africa, for example, is an upper middle income country that also has very high inequality. About half of the population lived on less than the equivalent of $5.5 per day in 2015.

In order to better understand the distribution of income in a society, therefore, we might use additional measures of income inequality alongside measures of average income. There are multiple ways of measuring or illustrating inequalities. These can be summarised with histograms or distributions; income shares of population quartiles, quintiles, or deciles; or single-figure measures, such as the Gini coefficient (see 9.3. Measuring inequality).

In addition to not giving any information about income distribution, GDP and similar income measures are limited in what they can tell us about the wellbeing of a population when used by themselves. As highlighted by the Indian economist Amartya Sen, considering only average income as a measure of development ignores non-market activity and market biases of value, as well as interdependences between these and other factors in development.[iv] Since these measures only sum up the total value of market transactions, they ignore the value of non-market goods and activities, including unpaid housework and childcare, a clean environment, security, and health, among others. Income measures are also biased by how markets value the transactions that are considered in these aggregations. As a result, economic activity that creates large emissions of pollution can contribute just as much to GDP as value added that takes place with little or no negative environmental impact, even if the latter is more supportive of better health and wellbeing for those living in the affected area.

Markets: To economists, markets refer to spaces (including virtual spaces) where buyers and sellers meet to engage in economic transactions of goods and services. In a free market, participants are free to sell and purchase from anyone else, using mutually agreed upon terms. These include product markets, labour markets, financial markets. The market value of transactions is thus the value of a product that would prevail in open and fair markets.

Value added: The difference between the output of an economy, sector, or firm and the cost of inputs, including intermediate goods, energy, etc. The sum of value added across all sectors of the economy is equal to the gross domestic product (GDP).

Ignoring the interdependencies between income and other factors in wellbeing is a further issue with relying on income as a measure of development. For example, a high income may be less beneficial to an individual who is not healthy or safe enough to enjoy the benefits of this income.

The shortcomings of GDP may not be very relevant where increases in income are associated with other widespread improvements in wellbeing. The danger is instead where the pursuit of higher income as a goal of national development leads to the prioritisation of strategies that do not foster improved opportunities for the poor and marginalised; progress in health, education, security, and other aspects of human development; or environmental sustainability.

2.4. Multidimensional measures of development

The limitations to relying on just income as a measure of development mean that other factors are often considered instead or, more commonly, in addition to income. There are many such multidimensional measures of development. This section includes a few examples of some influential frameworks, including definitional frameworks and indices that combine multiple indicators in a single value or ranking.

- Amartya Sen argued in his book *Development as Freedom* that development should best be seen as expanding the freedoms that individuals enjoy, and outlined five substantive freedoms on which to focus: political freedoms (e.g. the ability to determine who should govern and how), economic freedoms (e.g. the ability to make use of economic resources), social opportunities (e.g. access to education and health care), transparency guarantees (e.g. the openness of information by governments), and protective security (e.g. security against violence or starvation). Sen suggested that political and economic freedoms are also "instrumental" freedoms, in that they foster other freedoms as well.[v]
- The "doughnut" model is a recent framework from British economist Kate Raworth, which describes sustainable development as taking place between a social foundation (essentials needed for human life and wellbeing in areas including food, shelter, education, and political freedoms) and an ecological ceiling (environmental limitations that should not be surpassed for development to be sustainable, in areas such as climate change, air pollution, and biodiversity loss).[vi]
- The Human Development Index, which is used in the United Nations Development Programme's *Human Development Report*, is calculated using a country's GNI per capita (PPP USD), expected and mean years of schooling, and life expectancy at birth. Countries are categories as one of four levels of development, based on their index.[vii] The four levels, with example countries and rankings from 2022 are:
    - Very high human development (0.00 and higher): Switzerland (1st), Norway (2nd), Iceland (3rd)
    - High human development (0.700 to 0.799): China (79th), Brazil (87th), Indonesia (114th)
    - Medium human development (0.550 to 0.699): Philippines (116th), India (132nd), Kenya (152nd)

    - Low human development (below 0.550): Haiti (163rd), Ethiopia (175th), South Sudan (191st)
- The Sustainable Development Goals (SDGs) are made up of 17 interlinked goals (on topics including poverty reduction, health, education, and various environmental topics) agreed to by the United Nations General Assembly in 2015 that are to be achieved by 2030. These build upon the Millenium Development Goals (MDGs) that had been set in 2000 to be achieved by 2015 (see 10.1. International cooperation on development).

Figure 4. Sustainable Development Goals (SDGs)

Source: **United Nations** (n.d.). *The 17 Goals*. United Nations. New York. https://sdgs.un.org/goals.

Recognising the limitations of relying on GDP and other income measures to track progress, governments have sought ways to complement these measures with other indicators of human development and environmental sustainability. Some notable examples include the following:

- Bhutan's government famously tracks a Gross National Happiness Index that includes measures of sustainable and equitable development, environmental conservation, cultural preservation, and good governance.[viii]
- In 2008, the government of France established the Commission on the Measurement of Economic Performance and Social Progress, commonly referred to as the Stiglitz-Sen-Fitoussi Commission after the three economists who led it. The Commission recommended principles to guide the use of alternatives to GDP, including considering non-market activities, quality of life indicators, and environmental damage.[ix]
- In 2022, the United States announced plans to include natural capital accounts in its official statistics, which would measure the economic value of the country's natural assets, such as water, soil, air, and forests.[x]

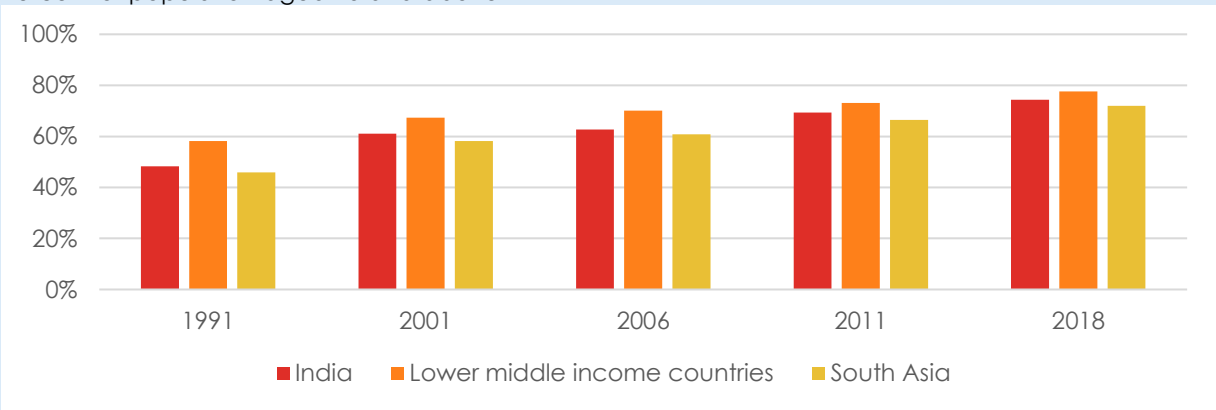
Resources: World Development Indicators

The World Bank's World Development Indicators is an excellent starting point for basic statistics on countries' economic and social development. It is a compilation of multiple databases. On a yearly basis and by country or country group (e.g. region or country income group), hundreds of series are available across eleven categories:

- Economic policy and debt
- Education
- Environment
- Financial Sector
- Gender
- Health
- Infrastructure
- Poverty
- Private sector and trade
- Public sector
- Social protection and labour

While information on developing countries is often missing, due to limitations in data collection, the standardised data facilitate comparisons across countries and over time. Try, for example, downloading the data and plotting a comparison of total adult literacy rates in India, in comparison to the averages for its country income group and region (information on these groupings is available here), for all years with available data between 1990 and 2020. It should look like Figure 5.

Figure 5. Adult literacy rate
Percent of population aged 15 and above



Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

3. Development strategies and the role of the state

In addition to the definitions and measures to be used, one of the central debates in development economics is on the appropriate roles of the state and markets in driving progress on development. Setting aside questions of inequality and non-income aspects of development, government involvement in the economy is seen as being mostly distortionary for those that see markets are being mostly efficient. They worry that attempts by governments to drive development are more likely to misidentify opportunities and in the process direct resources to inefficient uses or discourage firms and individuals from making the kinds of investments that would lead to innovation and growth. While these advocates of market-led growth often acknowledge the existence of market failures, they tend to be more concerned about the potential for government failures.

Efficiency: Economic efficiency describes the degree to which resources are put to their best use, minimising waste in production and transactions. Markets are made competitive through three forms of efficiency: allocative efficiency, through which resources are directed to the most efficient firms; productive efficiency, which results from firms having the incentives to produce with fewer inputs and lower costs; and dynamic efficiency, through which new entrants to the marker bring in new ideas and create competitive pressure on existing firms to motivate their improvement. Efficiency can specifically refer to producing Pareto optimal outcomes, in which no one can be made better off without making someone else worse off.

Market failure: Market failures occur where markets are unable to operate efficiently in balancing supply and demand, which does not result in Pareto optimal outcomes. These can arise from externalities (where market activities affect third parties, such as pollution from a factory affecting the health of nearby residents) or in the provision of public goods, asymmetric information (such as when individuals looking to buy used cars lower their willingness to pay because they do not know the quality of the vehicles), and where one party uses their market power to manipulate markets (such as where a monopoly seller raises prices). Market failures often imply a need for government policy in improving efficiency, though private sector and other non-governmental solutions are also sometimes possible.

Government failure: Government interventions in the economy that result in unnecessary decreases in efficiency relative to market-based outcomes are sometimes referred to as situations of government failure.

On the other side, those skeptical about market efficiency are likely to see significant need for government involvement in the economy. Often this skepticism comes from those who hold that the requirements of market efficiency are unrealistic, particularly in the context of developing economies. For one, perfect information is required for all market participants, though it is likely that individuals and firms in developing countries will have limited access to information on products, services, prices, etc. and that they will face higher search costs in obtaining this information. Market efficiency also requires that all contracts are enforced without cost, which requires strong institutions and governance that are often lacking in developing countries. Market failures may be more common as a result of imperfect information and costly contract enforcement, leading to informal institutions arising in place of markets (such as small business owners borrowing money from family rather than seeking out investors or borrowing from banks), externalities and coordination failures, and inequalities that affect economic performance. Some of those who are most concerned about the limitations of markets advocate for state-led development with a large role for government.

If we consider approaches to development on a spectrum from market-led to state-led approaches, the Washington Consensus and other strategies emphasising free markets and free trade would be on the more market-led end, opposed to strategies emphasising state ownership and intervention in the economy, such as import substitution (Figure 6). No real-world approach is actually purely market- or state-led, however, as there is always some combination of the two in practice. More clearly in between these are approaches that rely on market mechanisms, but also include significant targeted government interventions, such as the development state model adopted by a number of Asian economies in the middle and late 20th century.

Figure 6. Spectrum of development strategies

3.1. Import substitution industrialisation

Import substitution industrialisation (ISI) tries to encourage economic growth and development by limiting trade and relying to a greater extent on domestic production to meet domestic demand. Most importantly, tariffs and quotas are used to limit imports, and associated policies might include state ownership, subsidisation of sectors considered to be important, and government involvement in directing or regulating economic activities.

ISI was particularly popular in Latin America from the mid 20th century. There was some adoption of these policies in Africa as well, though not to the same extent as in Latin America. It lost influence in the 1980s after the OPEC oil price shocks contributed to the decline in its use as import costs rose and debts increased, with the situation worsening during the following debt crisis as interest rates rose on the loans that had been made to developing countries. International assistance programmes also came with requirements of economic liberalisation.

There were three main theoretical bases for ISI. The first was the infant industry argument, which said that productivity increases through learning effects, economies of scale, or spillovers, meaning that that new industries need to be protected from import competition from established producers while they are growing and becoming competitive. The second, based on the Prebisch-Singer hypothesis, suggested that the terms of trade of developing countries were disadvantaged because commodity prices tend to fall compared to the prices of manufactured goods over time, making commodity exporters worse off. Third, those looking at the relationship between developed and developing countries through the lens of dependency theory argued that the poorer "periphery" would be kept underdeveloped by a "core" that makes use of its resources, requiring developing countries to disconnect themselves from wealthy countries.

ISI has been criticised for limiting growth potential by focusing on the domestic economy. Indeed, import substitution was most successful in countries with large domestic markets, where economies of scale were possible. However, protected firms often remained less productive in any case because they were less exposed to competition and to international knowledge and technology. Government intervention can also misjudge opportunities and create opportunities for corruption, particularly where institutional capacities are weaker. Finally, the imposition of restrictions on trade creates the risk of provoking tariff escalations or trade wars with trade partners that might be valuable export markets.

3.2. Washington Consensus

The Washington Consensus, by contrast, is a market-led approach that advocates a limited role for government, along with openness to international trade and investment. No official definition of the Consensus exists, but it is often summarised by ten points defined by British economist John Williamson:

- Fiscal discipline (e.g. avoiding large government deficits)
- Redirection of subsidies to pro-growth and poverty-reduction investments
- Broadening tax bases and reforming rates to encourage growth
- Letting markets set interest rates
- Letting markets set exchange rates
- Liberalising trade (e.g. removing import tariffs and quotas)
- Liberalising foreign direct investment (FDI)
- Privatisation of state-owned firms
- Reduced regulations to limit market distortions
- Protection of property rights

The Washington Consensus was influential as an ideology particularly because of the role played by international financial institutions in spreading its adoption in developing countries. Notably, the International Monetary Fund and World Bank included "structural adjustment programmes" in the requirements for countries receiving loans. Especially during the 1990s, these programmes called for recipient countries to adopt Washington Consensus type reforms. More recently, the IMF and World Bank have moved beyond the Washington Consensus, including by requiring borrowing countries to plan poverty reduction and growth strategies in Poverty Reduction Strategy Papers.

Opponents of this approach to reform point out that improvements to efficiency do not necessarily provide strategies for encouraging growth, that Washington Consensus policy recommendations are limited in their scope (e.g. that developing a trade orientation requires more than just lowering tariffs), that different contexts require different solutions, and that too much reliance on rules in governance limits flexibility.

The results of these reforms were generally disappointing. There was limited growth sub-Saharan Africa and only brief growth in Latin America despite extensive reforms. Serious financial crises hit economies transitioning to greater reliance on markets (e.g. Russia in 1998, Argentina in 2002), weakening enthusiasm for free markets. Instead, improvements

in development came from countries that combined pro-market reforms with restrictions on trade, state control, active industrial policies (e.g. China and India).

3.3. Post-Washington Consensus

It has been clear for some time that the Washington Consensus was not providing a viable strategy for development. In 2005, World Bank acknowledged that there are no universal solutions for development.[xi] It isn't clear what should direct development thinking in its place. Rodrik presents two main schools of thought. One, focused on institutional reform, is similar to the Washington Consensus priorities, but places a greater emphasis on deeper reforms to improve governance and reduce corruption so that markets can work effectively. The other school of thought emphasises the need for increases in private and public investment and foreign aid, along with capacity building and improvements to governance. It assumes developing countries are stuck in "poverty traps" and require large increases in investment to overcome barriers to growth.[xii] This difference continues the debate between the advocates of market-led and state-led development strategies.

4. Convergence and income growth

Even if income is not by itself a sufficient measure of economic development by itself, it is directly relevant to wellbeing and a critical support for progress in other areas. It is therefore important to consider how the use of different measures of income affect our understanding of an economy's performance. With this in mind, we can look at recent growth trends around the world and the theories that have been particularly influential in shaping how we think about the factors that cause increased in income over the longer term.

4.1. Income measures

There are a variety of commonly-used measures of income, which are each used in particular circumstances. Gross domestic product (GDP) is the most widely used measure of economic activity. It is calculated as the sum of all economic activity in a country, typically during one year. It can be measured through three approaches, which ideally should produce the same total (though they never do in practice).

- Expenditure approach:
    - GDP = Consumption + Investment + Government spending + Net exports
        - Consumption: Goods and services
        - Investment: By businesses and households
        - Government spending: Current spending and investment
        - Net exports: Exports minus imports
- Output approach:
    - Alternatively, GDP is equal to the sum of value added across all sectors
- Income approach:
    - GDP is also equal to the sum of income received by all factors of production (e.g. wages, interest income, rents, and royalties)

GDP is not the only income measure, however. You may also come across gross national product (GNP), which is similar to GDP but adds income that flows into the country from elsewhere and deducts outflows of income (Table 1). Gross national income (GNI) is more commonly used, including by the World Bank in their country income categories or (on a per capita basis) in the UN's Human Development Index. GNI is similar to GNP, but instead measures the value of all income generated by the country's citizens, regardless of the location. GDP and GNI can be very different where a county has large inflows or outflows of income. In many developing countries, this difference is driven by foreign aid flows and the income earned by workers abroad, potentially making GNI higher than GDP in these countries.

Table 1. Comparison of income measures

	Domestic product	**National product**	**National income**
Gross	**Gross domestic product (GDP)** • Value of national output produced in the country	**Gross national product (GNP)** • Equals GNP plus net income from abroad • Less commonly used now	**Gross national income (GNI)** • Value of all income generated by country's citizens, regardless of location

	• Commonly used as a measure of economic size and growth		• Used by World Bank in country income categories
Net	**Net domestic product (NDP)** • GDP minus depreciation	**Net national product (NNP)** • GNP minus depreciation	**Net national income (NNI)** • GNI minus depreciation

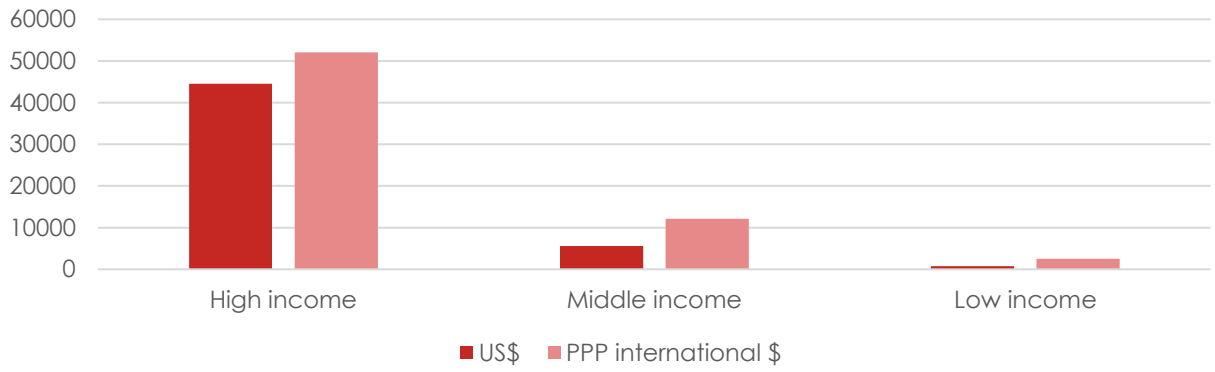
Income measures with names preceded by "net" differ from "gross" measures by the deduction of depreciation, the investment needed to maintain the same capital stock. Estimating the extent of depreciation can be challenging, however.

We can compare income levels between different countries at one point in time using nominal exchange rates, but if we want to compare purchasing power – how much people can afford to buy in their respective countries – we need to control for differences in price levels across countries. Typically, higher income countries have higher price levels, while lower income countries have lower price levels. This is known as the Balassa-Samuelson effect. In short, this effect describes how tradeable products like agricultural commodities, fuels, and manufactured goods tend to have similar prices across countries because if they were cheaper in one part of the world, they would be exported from there and prices elsewhere would fall. However, lower incomes in poorer countries mean that non-tradeable products like housing or personal services tend to be cheaper than they are in rich countries.

Nominal exchange rate: The nominal exchange rate is amount of domestic currency needed to purchase one unit of a foreign currency in foreign exchange markets. Nominal exchange rates differ from real exchange rates, which are the product of the nominal rate and the ratio of price levels in the two countries.

In order to measure income in an economy in terms of what can be purchased there and make comparisons about material wellbeing, we need to control for these cross-country differences in price level. This is why we sometimes use purchasing power parity (PPP) adjusted measures of income. These typically are measured in terms of "international dollars", which use the US economy as a basis for comparison. This means that if we look at the PPP-adjusted GDP per capita of a county, we see the average income of a person in that country in terms of how much that could purchase in the United States. The use of the United States as a basis is an arbitrary convention that allows for comparison between any two other countries. The result of this is that the GDP of lower-income countries can be much higher when measured with PPP adjustment compared with the GDP converted using the nominal exchange rate (Figure 7).

Figure 7. GDP per capita by country income group, 2019



Source: Author's calculations, using **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Price levels also change over time within an economy. Prices typically increase over time (inflation), though prices can also decline (deflation) in some less common situations. In much of the world, inflation is just a few percent each year as prices gradually rise. In unstable economies and during periods of crisis, inflation can be extremely high (see 5.2. Macroeconomic stability and crises). When we use income measures like GDP in order to know about how the amount of goods and services being exchanged in an economy is changing over time, we want to ignore how changing prices affect these totals. This is why the statisticians that produce these figures calculate constant price measures of income that measure income over time as though prices hadn't changed from their base year values. A rough guide to this different kinds of income measures and their use is provided in Figure 8.

Figure 8. Summary of price adjustments to income measures

	Nominal (Current prices)			Real (Constant prices)		
	Local currency units (LCU)	**US$**	**PPP, international $**	**Local currency units (LCU)**	**US$**	**PPP, international $**
Total	GDP or GNI (current LCU)	GDP or GNI (current US$)	GDP or GNI (current US$)	GDP or GN, PPP (constant LCU, base year X)	GDP or GNI (constant US$, base year X)	GDP or GN, PPP (constant US$, base year X)
Per capita	GDP or GNI per capita (current LCU)	GDP or GNI per capita (current US$)	GDP or GNI per capita (current US$)	GDP or GN per capita, PPP (constant LCU, base year X)	GDP or GNI per capita (constant US$, base year X)	GDP or GNI per capita, PPP (constant US$, base year X)

For comparison across countries

For comparison across time

For comparison of purchasing power

4.2. Convergence

The process of convergence refers to declining income gaps between the lower and higher income economies. Traditional economic thinking suggests that the marginal product of capital will be higher in countries with less-developed countries with smaller capital stocks than in capital-intensive developed countries due to diminishing returns. As a result, the expectation is that investment should flow into developing countries as investors seek the higher returns associated with developing countries' higher marginal product of capital. This would continue until capital per worker equalised across the world, eliminating productivity and income gaps across countries.

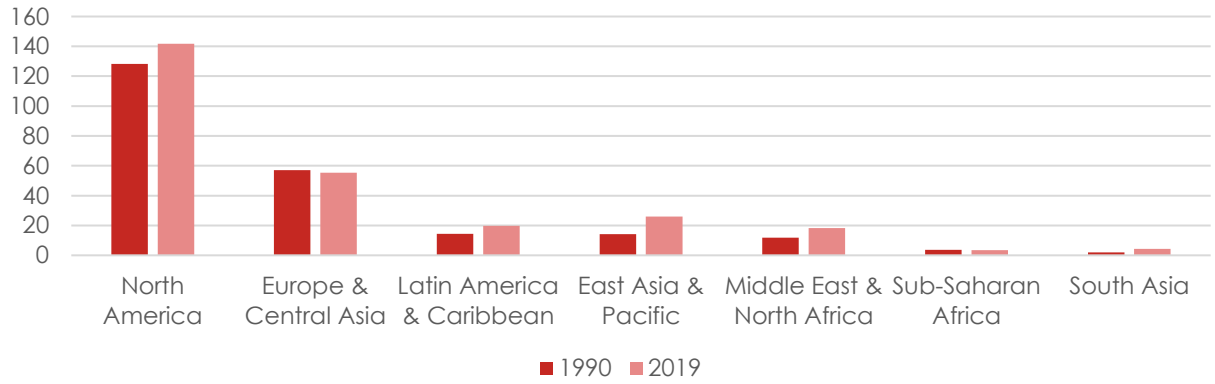
Marginal product: The marginal product of a factor of production (such as land, labour, and capital) is the additional output produced by adding one more unit of that factor while holding constant everything else in the production process.

Diminishing returns: The law of diminishing returns states that the marginal product of a factor of production declines as more of it is used. For example, increasing capital use in one firm without increasing the amount of labour employed can be expected to make positive, but increasingly smaller, contributions to the firm's output.

Developing economies may also be expected to grow faster than wealthy countries because they can benefit from the adoption of existing technologies that are already widely used in higher-income economies. Innovations in public health, agriculture, digital technologies and many other fields have the potential to improve wellbeing and productivity. By "leapfrogging", developing countries can benefit from the latest technology rather than passing through the same stages of development as today's wealthy countries. These processes have contributed to the rapid growth of countries that have seen rapid growth in the recent past; the East Asian economies that have had the greatest increases in income grew much faster than early industrialisers like Europe or the United States.

Over the past two decades, progress on convergence has been mixed. Relative to the average of high income countries, GDP per capita improved in Latin America and the Caribbean, East Asia and Pacific, Middle East and North Africa, and South Asia over 1990-2019, but declined in Europe and Central Asia and sub-Saharan Africa (Figure 9). The progress that has taken place has been slow; large gaps remain in much of the world.

Figure 9. Nominal GDP per capita relative to high-income country average by region, 1990 and 2019
HIC average = 100



Source: Author's calculations, using **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Looking back over a longer timeframe, a number of East Asian economies saw rapid growth, converging with high-income economies. Japan was the earliest of these. It was followed by a group referred to as the "Asian Tigers" in the 1960s and 1970s, which included Hong Kon, Singapore, the Republic of Korea, and Taiwan. Later on, growth picked up in Thailand, Malaysia, and Indonesia. More recently, China began growing at a rapid pace after a long stagnation. The reasons for convergence among these East Asian economies are debated among those who attribute economic growth primarily to their openness to trade and investment, a lack of large domestic income disparities, and effective government intervention in directing the economy.

In contrast, Latin America's debt crisis resulted in a "lost decade" of growth in the 1980s, slowing its convergence, though the region saw some recovery in the 2000s. Much of sub-Saharan Africa has seen little progress. Growth there also slowed in the 1980s and has not seen a significant recovery in most cases.

4.3. Growth theories

The diversity in performance of developing countries in past decades suggests that some approaches are more successful than others. Models of growth offer some explanations for what are the key elements of successful approaches. Five groups of growth models are discussed here, roughly in order of their emergence and era of greatest influence: linear change models, structural change models, dependency theory, neoclassical models, and endogenous growth theory and multiple equilibria. These models emphasise the importance of investment to raising future incomes, but differ considerably in their descriptions of where investment is needed and how it is to be achieved.

In reviewing these theories, it is important to keep in mind the warning of British statistician George Box: "All models are wrong, but some are useful." Simplified models of how real economies function highlight the importance of particular factors supporting growth, but their simplifications of reality can mean that these conclusions lack relevance in the real world.

4.3.1. Linear change models

Economists paid little attention to the question of development before the middle of the 20th century. The first models of to emerge described development in linear terms, as a series of stages through which economies would evolve as long as they achieved the right combinations of aggregate savings, investment, and foreign aid. For example, American economist Walt Rostow outlined a model with five stages of economic growth in the book *The Stages of Economic Growth: A Non-Communist Manifesto* (1960). According to Rostow, economic development is a process of moving up a ladder from traditional to high income and consumption levels across stages that can take several decades to pass through:

- **Traditional societies** are largely agricultural and make little use of technology. Incomes are low.
- During the **preconditions for take-off**, traditional societies begin to invest in education, develop markets and financial systems, and establish a small manufacturing sector. Incomes are low, but beginning to rise.
- The **take-off** happens as a result of industrialisation spreading through the economy, with manufacturing accounting for a greater share of value added and employment. Incomes rise, though unevenly.
- The **drive to maturity** follows the take-off and describes economies diversifying with new sectors growing as areas of economic activity established in the previous phases slow. Incomes are higher and poverty is greatly reduced.
- At the end of Rostow's process is the **age of high mass consumption** attained by advanced economies, where incomes are high and populations do not face subsistence challenges.

Emerging in the 1930s and 1940s in the United States, in the aftermath of the Great Depression and Second World War, the Harrod-Domar model is another linear change model that attempts to explain how investment is needed to drive economic growth. It describes a simple economy that is closed to international trade and has a fixed growth in the size of its labour force. No distinctions between different sectors of the economy are made. The capital-output ratio (the amount be which total output increases when capital is increased) is fixed as well, so growth only occurs as a result of increases in capital. Formally, this is written as:

$$\frac{(Y_{t+1} - Y_t)}{Y_t} = \left(\frac{s}{c}\right) - \delta$$

where Y is output, t is the time period, s is gross savings, c is the capital-output ratio, and δ is the rate of depreciation. A Keynesian model, Harrod-Domar suggests that there are three ways for an economy to grow faster:

- Increasing the savings rate, which increases the investment rate;
- Decreasing the capital-output ratio (increasing capital productivity); or
- Decreasing the depreciation rate of capital (improving the durability of capital).

Keynesian economics: Based on the work of British economist John Maynard Keynes, Keynesian economics emphasises the role of demand in driving economic activity. While Keynesians agree that market economies are needed for growth, they also see a role for the government and central bank in managing fiscal and monetary policy to smooth out variations in aggregate demand that disrupt the economy over the business cycle.

The logic of the Harrod-Domar model was influential in early thinking about development economics. Development strategies and foreign aid projects in the middle of the 20th century tended to emphasise investment in physical capital in order to drive growth in lower-income countries and regions. In particular, these investments often came in the form of large-scale infrastructure projects.

The model ignoring population and labour may seem unrealistic, though it might be considered a close approximation of the situation of developing economies with plentiful labour but little physical capital. Its realism has also been criticised on the grounds of the assumption that there is no substitution between capital and labour, the lack of a diminishing marginal product of capital, and a fixed savings rate. In fact, many of the countries that pursued investment in physical capital as a growth strategy (such as the Soviet Union) eventually saw stagnating growth, and many aid programmes that created new infrastructure had little effect without complementary investments and reforms.

4.3.2. Structural change models

Linear models of growth and development began to be challenged in the 1970s by structural change models, which suggested that capital accumulation alone was not sufficient to drive growth without addressing structural and institutional factors.

The Lewis model introduces a little more complexity into the stylised economy being described. It includes two sectors – a traditional agricultural sector and a modern industrial sector. Describing an economy at an early stage of development, the traditional sector is assumed to be subsistence-based and overpopulated. As a result, the marginal product of labour is zero, meaning that removing workers from the sector does not reduce its production. The workers in the traditional agricultural sector with zero marginal productivity are considered to be "surplus labour".

Growth in the Lewis model occurs through labour transfer from the traditional to the modern sector, which is made possible by investment and capital accumulation in the latter. Workers are motivated to move to the modern sector because the higher labour productivity there means that they can earn higher wages. This growth is self-sustaining, as the owners of capital are assumed to reinvest their profits in new capital, and continues until all surplus labour has transferred into the modern industrial sector. After this point, production in the traditional sector falls with the loss of its workers, as the marginal product of labour there rises above zero.

The process of structural transformation described in the Lewis model is not far off of the historical experience of Western economies as the Industrial Revolution took hold. It can help in explaining development as a process of rural-urban migration. However, some of its assumptions are not relevant to developing economies in the real world, such as ignoring that some investment in capital is likely to be labour-saving, reducing the

demand for new workers. The assumption of there being surplus labour in agriculture is also considered to be unrealistic in some contexts. Furthermore, markets are not the only factor influencing wages in industries that presumably would fall under the modern industrial sector, where institutional factors such as unions matter as well.

4.3.3. Dependency theory

The 1970s also saw the emergence of dependency theory and related schools of thought, which looked at how power imbalances between wealthy and poorer economies affect the opportunities available to the latter. Beyond the simple models described above, international-dependence thinking looks at the effects of institutional, political, and economic factors.

The neocolonial dependence model explains underdevelopment as a result of the unequal relationships between wealthy countries (sometimes described as the "core" or "centre") and poorer countries (sometimes described as the "periphery"), arguing that the former is exploitative towards the latter. Some elite groups in developing countries may support this relationship – consciously or otherwise – because their own interest align with those of the international capitalist system. In contrast to earlier economic models, this perspective sees development barriers as arising from external factors rather than internal characteristics of less-developed economies. Other international-dependence approaches emphasise that development economic thinking ignores the importance of social and institutional change and so is not sufficient to drive development.

These theories do not offer clear prescriptions on what is needed to foster development. Though they are often used to justify state-led development and self-sufficiency, in order to distance less-developed economies from international capitalism, such development strategies have had little success in the real world.

4.3.4. Neoclassical models

During the 1980s and 1990s, neoclassical economic thinking began to emphasise the need for free markets with limited government involvement as the driver of economic growth. The neoclassical counter-revolution occurred in response to the increase in government interventions that had occurred in the 1970s, and was supported politically by the election of conservative governments in a number of wealthy countries. Applied to questions of development, neoclassicists blamed lack of growth on resources being allocated incorrectly because of insufficient use of market mechanisms in setting prices. As a result, they recommended free markets, the liberalisation of state-owned enterprises, and openness to international trade and investment as drivers of growth.

The Solow (or Solow-Swan) neoclassical growth model is similar to the Harrod-Domar model, but adds labour as a second factor of production alongside capital. It also includes positive but diminishing returns to labour and capital separately and constant returns to both factors jointly. The model's neoclassical production function (known as a Cobb-Douglas production function) is:

$$Y = K^{\alpha}(AL)^{1-\alpha}$$

where *Y* is output, *K* is the stock of capital (potentially including human capital), L is the labour force, *A* is total factor productivity, and *α* is the elasticity of output with respect to capital (which is assumed to be less than 1). With a bit of calculus, it can be seen that this production function has positive but declining marginal productivity to labour and capital and constant returns to scale. The key difference from the Harrod-Domar model is that this production function allows for substitution between capital and labour.

The capital-labour ratio is determined by the Solow equation:

$$\Delta k = sf(k) - (\delta + n)k$$

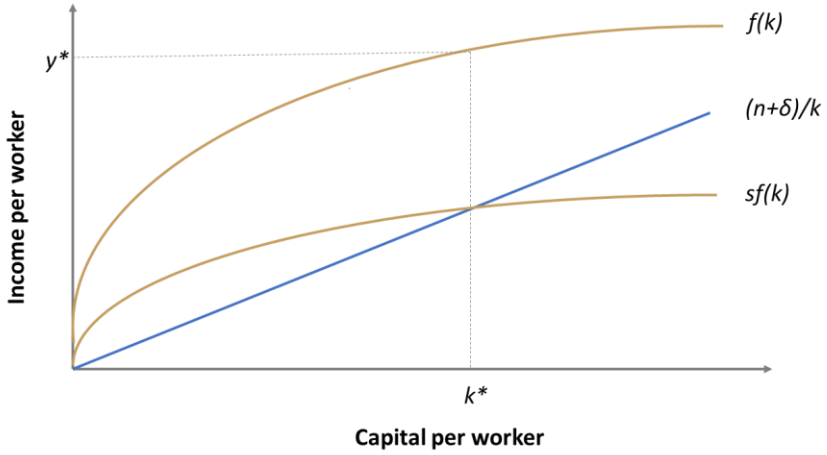
where *k* is capital per worker, *s* is savings, δ is the rate of depreciation, and *n* is the growth rate of the number of workers. This suggests three ways that growth can occur:

- Expansion of the labour force (increase in *n*) or improvements in labour quality, such as through improved education;
- Increases in the stock of capital, though saving and investment (increase in *s*) or reduction in depreciation (decrease in δ); and
- Improvements in technology or other improvements to productivity (increases in *A* in the production function).

Elasticity: The sensitivities of economic measures to changes in other economics are measured with elasticities. For example, the elasticity of supply with respect to price is measured as the percentage change in quantity supplied divided by the percentage change in price. A ratio greater than one is then described as being elastic (with a ratio of infinity being perfectly elastic – a decrease in prices will lead to the quantity supplied dropping to zero). A ratio less than one is described as being inelastic (with a ratio of zero being perfectly inelastic, where the quantity supplied does not change in response to price).

The Solow model implies that there will be conditional convergence – that income per worker will converge across different economies that have the same savings and depreciation rates, labour force growth rates, and productivity. Any specific economy will converge to a steady state equilibrium level of capital per capita and associated output per capita, as determined by the production function, which can be derived mathematically from the Solow model production function stated above (Figure 10).

Figure 10. Solow model at its steady state



Like the linear change models, the Solow model describes an economy without acknowledging its structure and composition. And as an exogenous growth model, it does not explain what determines the factors that drive growth, such as technological change. Empirical studies have shown that much of growth over the long term cannot be attributed to increased use of capital and labour, but to the residual factor in the production function that represents technology, know-how, and other difficult to measure determinants of output. Solow himself famously referred to this as a "measure of our ignorance"

4.3.5. Endogenous growth theory and multiple equilibria

Changes in output not attributable to changes in capital and labour are attributed to the Solow residual. This ends up being extremely important, accounting for about half of wealthy countries' historical growth. It is understood to capture the role of technological progress in supporting growth, but allowing for expansion in output without increasing the amount of capital and labour used in production. Endogenous growth theory (sometimes referred to as "new growth theory") tries to explain key variables such as technology, savings, and labour inputs in order to explain the lack of absolute convergence observed in the real world. This differs from "exogenous" approaches that assume these variables as being set outside of the model.

Endogenous models also differ from neoclassical models in allowing for increasing returns to scale in aggregate production, such as those that might arise from the positive externalities of improvements in education. These models explain the lack of large investments in capital-poor economies by the lack of complementary investments – in human capital, infrastructure, research and development, for example – in these countries that keeps returns to capital low.

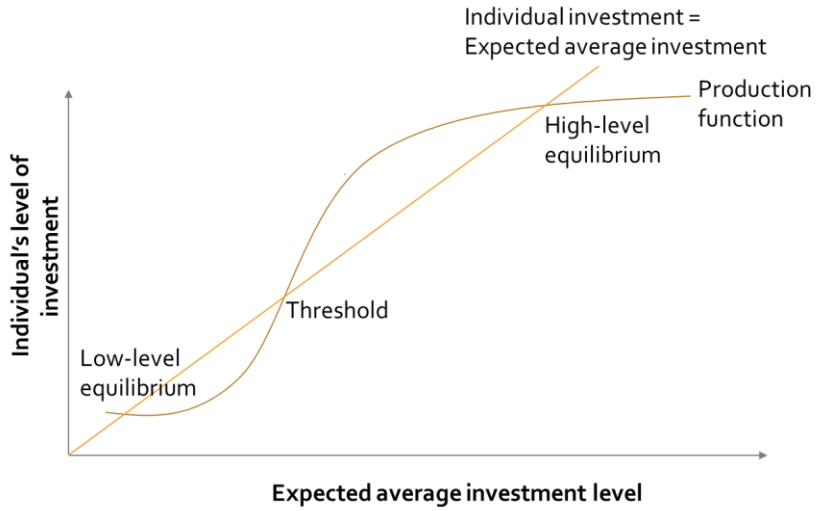
The Romer model describes technological change as the result of investment in R&D. The main policy implication of this is that there is a need to balance the goals of benefitting from current capacities to increase production or invest in higher productivity in the future. This and other endogenous models still take shortcuts in describing the reality of developing countries. They ignore economic structure and the role of structural change, instead describing the economy as though it were made up of a single sector. They also do not account for infrastructure challenges and market inefficiencies and focus on long-term growth factors, possibly to the detriment of addressing important issues in the short- and medium-term.

While most economic models assume the existence of a single point of equilibrium, endogenous growth models suggest the possibility of economies having multiple equilibria. In particular, the increasing returns allowed for in these models make multiple equilibria possible. Increasing returns exist where costs per unit of production drop with expansion and may be the result of network complementarities, which are created when others taking an action makes the action more attractive. For example, think of how social media platforms are more useful when they have more members.

Equilibrium: In economics, the stable point of a system is referred to as an equilibrium (e.g. where supply equals demand). Once this point is reached, its system tends to stay in equilibrium unless a new, external force acts upon it.

At the level of the economy as a whole, network complementarities might arise when individuals hold back on making investments that they don't expect to pay off, because the incomes are too low for customers to purchase the output. If enough individuals make the same calculation, investment and incomes end up depressed as a result, trapping the economy at a low-level equilibrium. If, however, investment expectations exceed a threshold level defined by the specifics of the production function, the economy is then pushed towards its high-level equilibrium (Figure 11). History plays a bigger role in multiple equilibria models, as starting positions are very relevant.

Figure 11. Multiple equilibria



The policy implications of multiple equilibria models are that there may be a role for government to push the economy towards the high-level equilibrium (as a one-time "big push" past the threshold level). This logic is also sometimes used in arguments calling for large increases to foreign aid (see 10.2. Designing and evaluating interventions).

5. Population, stability, and growth in special contexts

In addition to increasing investment, economic growth prospects are affected by a range of broader contextual factors. Among others, these include demographic trends; macroeconomic stability; and social and geographical factors that overlap with economic considerations.

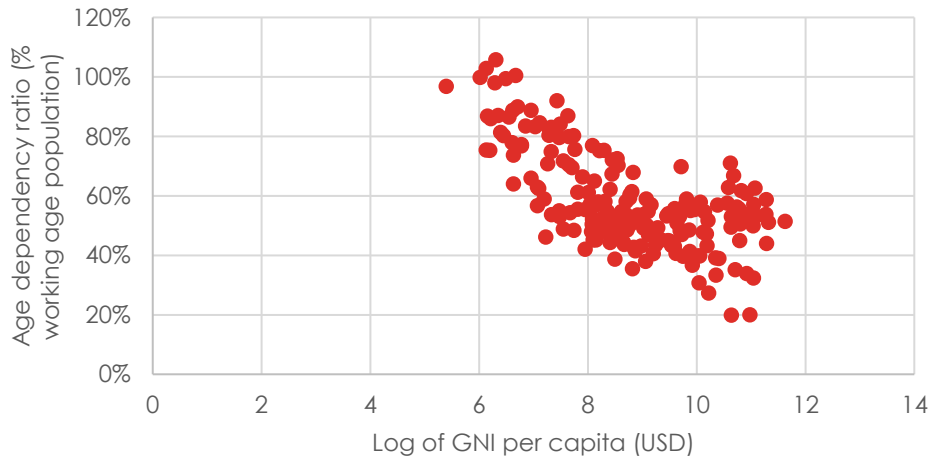
5.1. Demographics and growth

Demographic change and income growth are closely connected. A larger working age population can create opportunities for faster economic development. At the same time, population is also affected by economic development, as illustrated by the demographic transition model.

Mathematically, income per capita is equal to the product of the average value added per worker (labour productivity) and the number of workers. Labour utilisation is affected by a number of social and cultural, policy, and economic factors. Demographic factors are also extremely important; having a larger share of the population at the age when people work can support rapid economic growth. This share is commonly measured using the dependency ratio. Because of their young populations, lower-income societies often have very high dependency ratios (Figure 12). African populations in particular are quite young. The age dependency ratio was 83.7% in sub-Saharan Africa in 2020. In comparison, it was just 55.9% in the European Union. While young populations can pose challenges in the present, these countries are likely to encounter growth opportunities in the future as they progress through the demographic transition.

Dependency ratio: The dependency ratio of a population is a measure of the size of its population that is outside of working age, relative to the working age population. It is calculated as the total population under 15 years old and population over 65 years old, divided by the population aged 15 to 65, so a higher dependency ratio indicates that there are fewer people of working age for each young or elderly person.

Figure 12. Age dependency ratio and GNI per capita, 2020

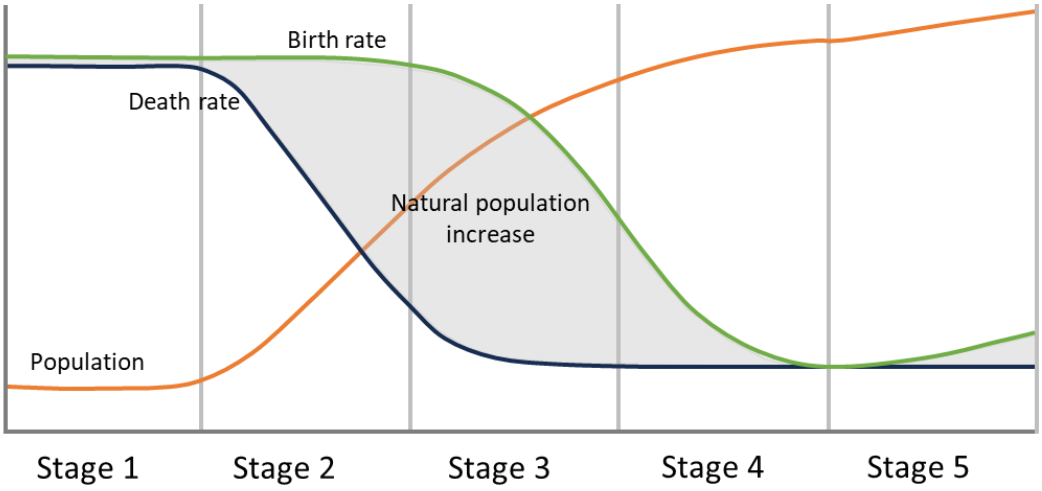


Source: Author's calculations, using **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

The demographic transition model provides a highly stylised model of how development drives demographic change, explaining why we tend to find young populations in poorer countries and old populations in wealthy countries. The model describes how a society is likely to pass through five stages in transitioning from a smaller population with high birth and death rates to a larger population with low birth and death rates (Figure 13).

- Stage 1: Death rates are high, including high infant mortality because health and living conditions are poor. Because of this and the economic incentives for having large numbers of children in a lower-income and largely agricultural economy, people have many children.
- Stage 2: Economic growth and improved public health lower death rates, though the incentives for having large families remain. As a result, the population begins to increase. The large numbers of young people soon enter the workforce, increasing the working age population and reducing the age dependency ratio.
- Stage 3: Economic changes – including the need to invest in children's education and more women working outside the home – encourage people to have fewer children. Birth rates begin to fall as death rates continue to decline or settle at a new (lower) level. Population growth continues.
- Stage 4: Birth and death rates both settle at their lower levels. Population growth slows.
- Stage 5: Increasing economic opportunities lead to a rebound in birth rates as more people can afford to have more children. Population increases again, but gradually.

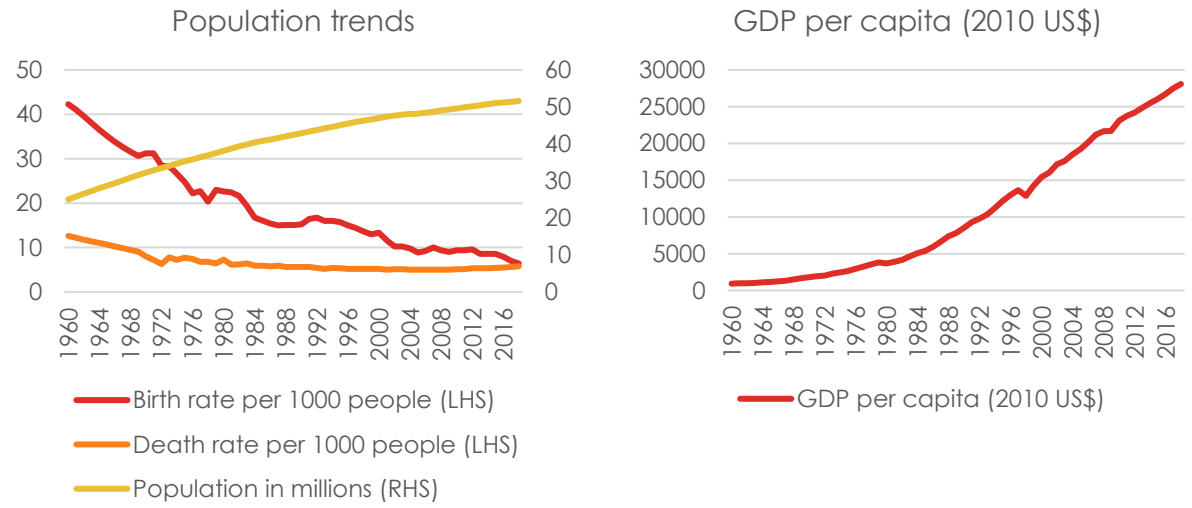
Figure 13. Demographic transition model



While this model is widely accepted as a way of describing general trends, it is not a law and does not predict the future of any society. It is not clear how long a population will stay in each stage for, it may accelerate or backtrack or follow an entirely different path. And the model completely ignores how major upheavals like war and disease affect populations.

It is useful, however, in providing a template for understanding how economic change affects populations, which in turn affects growth prospects. Investing in education for young people increases productivity, and the dynamism of young entrepreneurs can help to introduce innovative products and production processes. The growing working age population around the middle of the demographic transition means that the dependency ratio is low, potentially raising income per capita if these working age adults can find employment or start businesses of their own and if productivity is not adversely affected. At the same time, savings and investment are likely to increase, as the working age population saves some of their earnings. For example, the Republic of Korea has passed through these demographic stages since the mid-20th century (Figure 14). During this period, its income grew rapidly soon after death rates were falling faster than birth rates, creating a large working-age population that facilitated investment and productivity improvements.

Figure 14. Demographic transition and economic growth in the Republic of Korea, 1960-2018



Note: Due to data limitations, these figures only illustrate the later stages of the demographic transition in the Republic of Korea, which would have begun before 1960.
Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

This window of opportunity is not guaranteed to lead to sustained growth, however. If there are not economic opportunities for a young population, high levels of youth unemployment can be problematic. Unemployed young workers might miss out on opportunities to develop skills on the job at the beginning of their careers and can contribute to social instability, particularly in societies affected by conflict and political violence.

5.2. Macroeconomic stability and crises

When economists talk about an economy's prospects for growth in the near future they often pay particular attention to macroeconomic stability, which refers to there being sustainable differences in key economic relationships such as domestic demand and output, balance of payments, fiscal revenues and expenditure, and savings and

investment. Causes for concern might include imbalances such as large current account deficits financed by short-term borrowing, high and rising levels of public debt, and stagnant or declining GDP.

High levels of inflation are also an indicator of macroeconomic instability. Low levels of inflation can be mostly harmless or potentially even good for economic growth. Short-term inflation may be the result of supply and demand factors, such as increases in the price of imports. Over the longer term, however, inflation is the result of too much money chasing after too few available goods and services, which pushes up prices. Hyperinflation – crisis periods of extremely rapid price increases – are typically caused by the financing of government deficits by creating new money, which quickly loses its value. Sustained high levels of inflation can be very disruptive to the economy, as they encourage hoarding and increase transaction and menu costs as unstable prices complicate planning and exchange.

In addition to these largely domestic factors, developing economies are exposed to risks from international crises, which can reduce demand for exports and slow inflows of investment and remittances. Some of the major crises from the recent past illustrate the channels through which developing countries are affected:

- The **Asian Financial Crisis** (1997) began as a currency crisis in Thailand when the government was forced to let the currency float, leading to capital outflows from across the region and beyond as investors reacted. Credit withdrawals eventually spread to the real economy, leading to declines in GDP.
- The **Global Financial Crisis** of 2007-08 that began with excessing risk-taking by banks and the bursting of the US housing bubble, leading to financial institutions around the world experiencing losses from securities tied to US real estate. Incomes in developing countries were negatively affected by financial contagion (indirect financial effects, such as on their own stock markets), the effects on international trade and reduced demand for their exports, declining remittances, falling foreign investment, reduced commercial lending, and declines and shifts in foreign aid.
- The **COVID-19 pandemic** caused a drop in global GDP of 3.6% in 2020. As with developed economies, developing economies were hit by the effects of lockdowns and limitations on mobility and production, the direct impacts of COVID-19 on the labour force, reduced domestic demand, and shifts in government spending and increases in debt. They were also affected by external factors including reduced demand in export markets due to falling income and supply chain disruptions, new barriers to trade and the movement of people, declines in remittances, and declining inflows of investment and foreign aid.

Currency crisis: A currency crisis occurs when a country's currency experiences a sudden drop in value. These often occur in countries with fixed exchange rates, when the central bank does not have sufficient foreign exchange to maintain the official exchange rate and is forced to devalue (lower the official value of) the currency. As a result of the fall in value of the currency, debt denominated in foreign currencies becomes more expensive to repay and imports become more expensive.

5.3. Special contexts

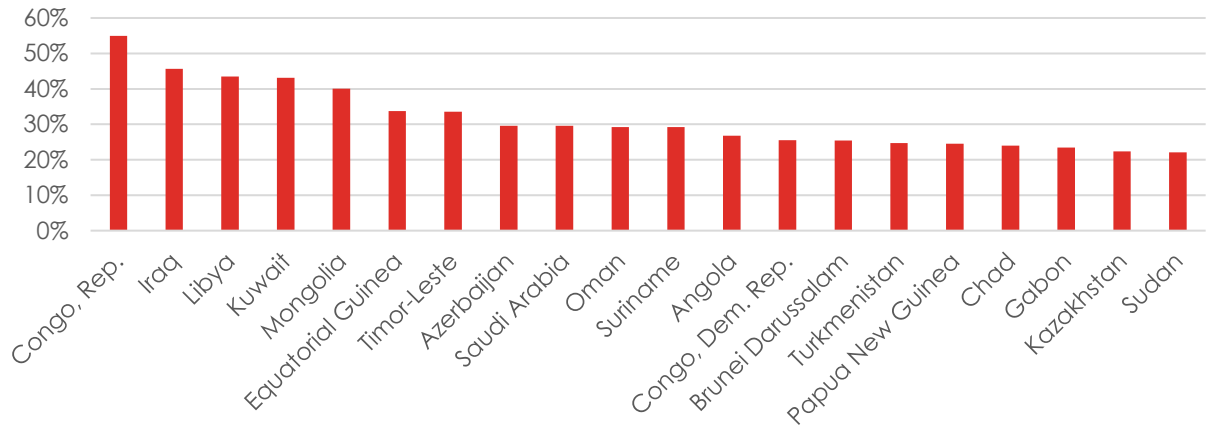
The prospects for growth in many developing countries are affected by unique contextual factors. In particular, the growth paths of many developing countries are may be made more challenging by their resource endowments, exposure to conflict, and geography.

5.3.1. Reliance on natural resource wealth

Many lower income countries depend relatively heavily on exports of natural resources. While access to valuable natural resources would seem to be a factor supporting a country's development prospects, this is often not the case. The "resource curse" refers to the seemingly counterintuitive result that many economies with large endowments of natural resources (such as oil or minerals) have not benefitted from this wealth but have instead experienced instability and low levels of growth. Indeed, the top 20 countries by natural resource rents as a share of GDP include mostly less-developed countries (Figure 15). These countries typically have large natural endowments of resources such as oil, gas, minerals (including gold, rare earths, and diamonds), and timber, and lack diversified economies.

Rents: Economic rent refers to income earned by the owner of a factor of production above the opportunity cost or competitive price for that factor. Rents typically arise because of scarcity, such as through access to natural resources or ownership of a patent. Rentier capitalism and rentier states refer to situations where unproductive forms of economic activity are dominant.

Figure 15. Natural resource rents as % of GDP (top 20 countries), 2018



Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Many explanations for the relationship between resource wealth and underdevelopment have been suggested, including Dutch disease and a lack of incentives for economic diversification, labour market and human capital effects; institutional underdevelopment, fostering the creation of a rentier state; inefficient government borrowing and spending; and the role of resources in motivating and funding conflict.

Dutch disease: Dutch disease refers to the idea that a country with strong natural resource exports is likely to see a strengthening of its currency that makes its other exports less competitive and imports cheaper.

As a result of this, manufacturing and other sectors that are forced to compete with cheaper alternatives from elsewhere cannot grow, leaving the economy dependent on its natural resource exports. It is named after the experience of the Netherlands in the 1970s, where the manufacturing sector declined after the discovery of a large natural gas deposit.

Policy priorities for low-income countries with large natural resource endowments may include enhancing transparency and accountability in resource extraction and use (including international voluntary processes such as Kimberley Process, FLEGT, Publish What You Pay campaign); adopting fiscal rules to manage volatility; and improving public sector capacities in resource management and budgeting to channel revenues into human development and economic diversification.

5.3.2. Conflict and post-conflict societies

In addition to the terrible human costs of war, conflict affects prospects for economic development through several channels. Economic resources are redirected from productive uses; infrastructure is destroyed; and the labour force can be affected during and following conflict by the mobilisation of the population, population displacement, and loss of life and disability. The fracturing of social ties and weakening or collapse of state institutions and rule of law can also have long-lasting effects that hinder growth prospects.

Peacebuilding is required to set the stage for economic recovery, though economic development can also itself be a driver of stability that supports peacebuilding. This process of peacebuilding often includes the following stages, which may overlap:

- End of violence and signing of peace agreements;
- Demobilisation, disarmament and reintegration;
- Return of displaced persons;
- Rebuilding foundations of an inclusive state;
- Reconciliation efforts; and
- Beginning of economic recovery.

5.3.3. Landlocked and small island developing states

Geography can create further challenges for some developing countries. Recognising their unique features, the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States (UN-OHRLLS) was established by the United Nations General Assembly in 2001.

Around the world, there are 32 landlocked developing countries (LLDCs), of which 17 are among the least developed countries. LLDCs face high transportation costs for exporting (particularly since they are also often next to other developing countries with weaker and high-cost transportation/logistics services. High transportation costs, in turn, undercut the cost competitiveness of LLDCs and lead to non-diversified, vulnerable exports.

There are 38 members of the United Nations that are small island developing states (SIDs). These are primarily (but not exclusively) found in the Caribbean and Pacific, and include nine least developed countries. In addition, there are 20 non-UN members / associate

members in this category. Due to their small size, SIDs tend to have narrow resource bases, limiting economies of scale. They are also typically constrained by their small domestic markets and dependence on a few external markets. As a result of their geographic isolation, they tend to face high costs for imported inputs, energy, transportation and communication. As islands, SIDs are further exposed to climate change and natural disaster risks, with fragile natural environments.

6. Private sector development

Studying only the macro factors behind growth – such as savings, investment, and population and labour utilisation – will only tell us so much about how growth is happening in an economy and what prospects there are for continued growth in the future. We also need to look at micro-level factors such as what is happening at the level of the sector, firm, and individual. This includes considering how economies shift towards producing more advanced goods and services through structural transformation and the policy and other factors in the business environment that drive private sector development.

6.1. Structural transformation

Structural transformation – the transition of labour and investment from lower to higher productivity sectors – is an important part of development for most economies. As described simply in the Lewis model (see 4.3.2. Structural change models), this is often seen through the reduction of shares of value added and employment in agriculture and increase in these shares in modern manufacturing and services. Within manufacturing, structural transformation includes the movement from labour-intensive and lower-value activities (e.g. garment manufacturing) to higher-value and capital- and technology-driven activities (e.g. motor vehicle manufacturing). Structural transformation improves productivity, but is also driven by increased productivity and wages, as increasing labour expenses drive investments in capital and technology (Box 2).

Box 2. Illustrating structural transformation through shift-share decompositions of productivity growth

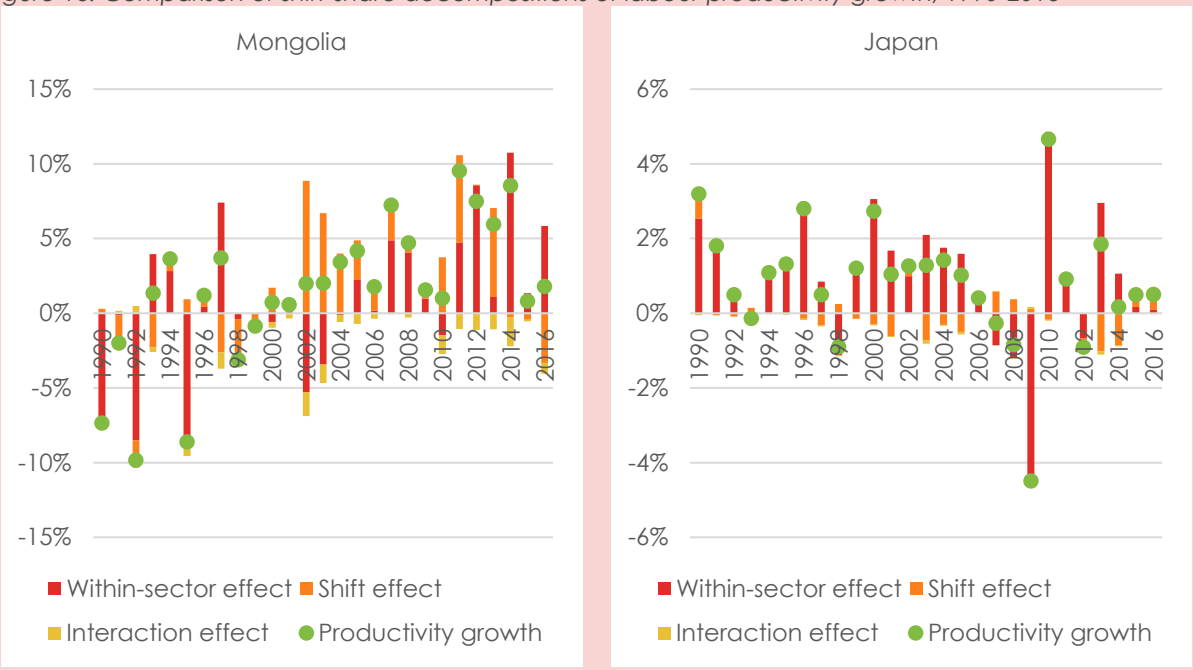
There are multiple ways of studying or illustrating the process of structural transformation. We might look at the share of total employment, investment, or value added in different sectors of the economy over time, for example. We can also look at where improvements in productivity are coming from through a shift-share decomposition. We calculate this with the following formula:

$$\frac{\Delta \mathrm{LP}}{LP_{t-1}} = \sum_i \frac{\Delta \mathrm{LP}_i}{LP_{it-1}} \frac{Y_{it-1}}{Y_{t-1}} + \sum_i \frac{LP_{it-1}}{LP_{t-1}} \left(\frac{L_{it}}{L_t} - \frac{L_{it-1}}{L_{t-1}} \right) + \sum_i \frac{1}{LP_{t-1}} (\Delta \mathrm{LP}_i) \Delta \left(\frac{L_i}{L} \right)$$

where *L* is employment, *LP* is value added per worker, *Y* is value added, *i* is the economic sector, and *t* is the time period. While it looks like a cumbersome equation, its interpretation is quite simple: the three terms on the right side of the equation then respectively tell us the within-sector effect, or how much productivity grew without considering the effects of worker movement between sectors; the shift effect, or how much productivity grew because workers moved into higher productivity sectors; and the residual, which is positive when sectors with growing productivity grew in employment share and is negative when sectors with growing productivity declined in employment share.

Using this decomposition, we can see clearly how economies undergoing structural transformation undergo productivity growth as a result of changing sectoral composition. For example, much of Mongolia's year-to-year productivity growth over 1990-2016 occurred through the shift effect (Figure 16). In contrast, in Japan over this period, the within-sector effect was generally much more important. A high income economy that has already passed through its process of structural transformation, there is little room to drive continued productivity growth through the movement of workers between sectors.

Figure 16. Comparison of shift-share decompositions of labour productivity growth, 1990-2016



Source: Author's calculations, using APO (n.d.). *APO Productivity Database*. APO. Tokyo. https://www.apo-tokyo.org/productivitydatabook.

Structural transformation tends to make a greater contribution to growth at an early stage of development, since workers can only be moved into higher value-added sectors for song long before running out of workers in less-productive sectors. Employment shifts also tend to occur alongside "capital deepening" or "factor accumulation" – the increase in the capital per worker as a part of developing new economic sectors – which tend to be subject to diminishing marginal returns. One result is that growth often stalls in countries that had previously seen rapid growth led by structural transformation and investment. This is commonly referred to as the "middle-income trap". The countries that have successfully continued their growth have typically needed to adopt new development strategies that emphasise enhanced productivity and innovation. On the other hand, incomplete structural transformation may result in a "dual economy" with lower-productivity agriculture and labour-intensive activities existing alongside higher-productive manufacturing and modern services.

6.2. Informality

A broad term, informality includes informal (non-registered) firms and informal workers, who work in in informal firms and who are employed as informal workers in formal firms. Although some countries have seen falling informality and rising poverty together, informality tends to be associated with lower productivity and lower levels of development. Informality represents 70% of all employment in developing and emerging countries, compared with about 18% in developed countries. Informal firms have more difficulty accessing finance and building business connections and informal work can provide economic opportunities for marginalized groups, particularly when economic

growth stalls. Large-scale informality can also be a significant barrier to governments raising tax revenues.

There is no consensus on the causes of informality, with different explanations attributing high levels of informality to differing combinations of:

- structural factors, as informal work employs surplus-low skilled labour left out of higher-productivity work offering government-mandated benefits;
- legislative or regulatory factors, where the costs of formality are too high as a result of regulation and/or taxation and weak enforcement capacities; and
- behavioural factors, where individuals are not aware of or do not value the benefits of formality.

Potential policy priorities on informality may include measures to reduce the costs of registering firms and workers, such as through reduced regulatory burdens, implementing tax reforms to reduce avoidance, and also raising awareness of the benefits of formalisation. Others call for developing the skills of informal works through training programmes and improving access to finance and promoting the right to collective bargaining in the informal sector. And while not exactly a policy for reducing informality, initiatives extending coverage of contributory social protections (particularly social insurance) to informal workers can help protect these workers from the higher levels of risk they face.

6.3. Product and labour market regulation

Regulation is used for legitimate reasons, including addressing market failures, such as limiting environmental damage or emissions; supporting public health or security goals; avoiding abuse of market power; and fostering growth. It is also possible for regulation to have negative effects on competitiveness through the distortions created by government involvement, such as through the activities of state-owned enterprises (SOEs), involvement in business operations (e.g. price controls), restrictions on foreign trade and investment, and the costs to firms of complying with complex regulations. Regulatory barriers affecting new firms and entrepreneurs can also have an impact, through high administrative costs for start-ups that hinder efficiency.

Labour market regulation needs to balance the protection of workers with fostering growth and the creation of new employment opportunities. Efficient labor markets contribute to enhanced productivity by ensuring flexibility in production and matching workers to suitable jobs. Governments might intervene in labour markets through regulations on individual and collective dismissal, minimum wages, collective bargaining rules, and working hours.

The effectiveness of the labor market could be further enhanced through increased funding for active labor market programs (ALMPs). Such initiatives encompass public sector job creation, worker skills development and updating, support for youth employment, employment subsidies, as well as provisions for disabled workers. Enhancements in workers' protections could also coincide with eased labor market regulations, which might be achieved via extended social security programs that

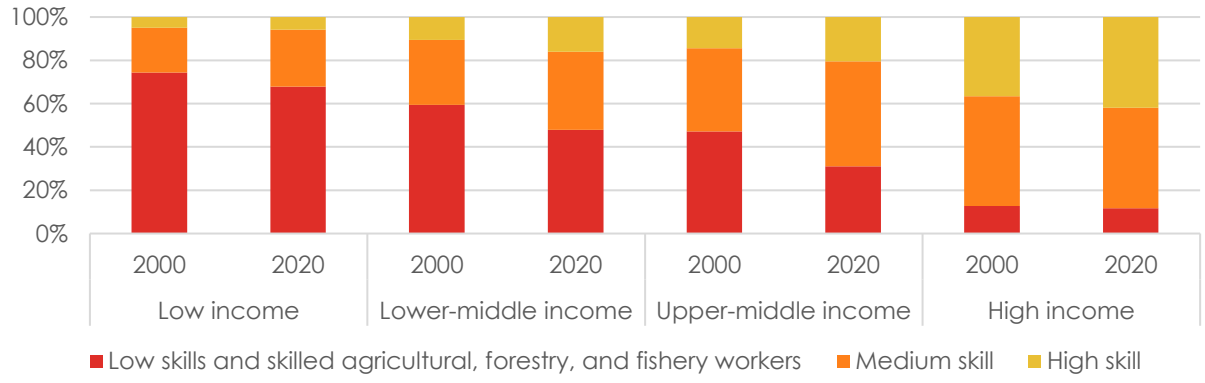
incorporate limited unemployment compensation and unemployment insurance coverage.

6.4. Education and skill development

Education and skill development systems include both formal and non-formal learning through schools (primary, secondary, and tertiary); technical and vocational education and training (TVET); and apprenticeships, on-the-job training and other forms of training.

Educational priorities change with growth and structural transformation (Figure 17). While all levels of education are important at all stages of development, a lower-income economy with much of the workforce employed in labour-intensive activities will likely need low-skilled workers educated at the primary and secondary level, who also receive on-the-job training. An industrialising economy with many employed in capital-intensive activities will need technicians with some specific training gained through some post-secondary education and programmes for existing workers to upgrade their skills. Advanced economies with large knowledge-intensive sectors are likely to have a greater need for scientists and engineers educated at the post-secondary level and with access to continuous lifelong learning.

Figure 17. Employment by skill level and country income grouping, 2000 and 2020
Percent of total civil employment



Source: UNCTAD (2021). *Technology and Innovation Report 2021*. UNCTAD. Geneva. https://unctad.org/system/files/official-document/tir2020_en.pdf.

6.5. Access to finance

Financial services make a large contribution to development by supporting efficient resource allocation and lowering the costs of domestic and international transactions, as well as the direct contributions to value added from the provision of financial services to domestic and international customers. However, financial inclusion is often a challenge in lower-income countries with less-developed financial sectors. This means that there may be significant inequalities in access to financial services such as banking, borrowing, insurance by firms and individuals to build and run businesses, invest in education, save for retirement, and manage risks. Women, low-income individuals, and youth are often least likely to use financial services (Figure 18).

Figure 18. Population with an account at a financial institution or mobile money provider, 2017
Percent of population aged 15 or older

Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Some of these differences are the result of voluntary exclusion, caused by lower demand among non-users of financial services, either because of the lack of perceived need, costs, or cultural or other reasons. More worrying is involuntary exclusion that is caused by potential users with insufficient income or who are perceived as being too high risk, as well as those excluded because of discrimination, lack of information, weak contract enforcement, and market failures.[xiii]

Lower income countries tend to have less developed financial systems more generally. Banking and financial markets are weak; for example, fewer stocks and bonds are traded relative to GDP in these countries. Banks and capital markets can be complementary in supporting the development of the private sector, though banks may be most important at early stages of development and capital markets becoming increasingly important later. Banks form relationships with borrowers that help inform decision-making on lending, provide information to encourage improvements in corporate governance, and offer better risk sharing over time. Capital markets are better suited to supporting innovative, high risk, and high growth opportunities. They also provide incentives to exercise corporate control (e.g. by replacing incompetent managers) and are effective at gathering and interpreting information on firms. As a result, capital markets may help to address the lack of transparency in bank-based systems.

Fintech (the use of digital technologies to provide innovative financial services) doesn't solve all problems, but the greater use of computers and ICT in financial services helps in reducing information asymmetry, lowering transaction costs, allowing efficient matching of lenders and borrowers, reducing barriers to entry, and improving economies of scope in the sector.

6.6. Infrastructure

Firms and individuals rely on physical infrastructure, which enhances the efficiency of production and exchange. While the quality of infrastructure is often challenging to

measure directly, the following indicators are commonly used for different types of infrastructure in making comparisons across countries and over time:

- **Transportation** (roads, rail, seaports, airports): Road/rail density, share of roads that are paved or passable all year, extent or use of other modes of transportation
- **Energy** (power generation and transmission, oil and gas pipelines and facilities): Access to electricity, reliability of electricity supply, costs for use
- **Communications** (phone, Internet): Access to the Internet, connection speeds, costs for use
- **Water and sanitation**: Access to clean water, access to sewage systems

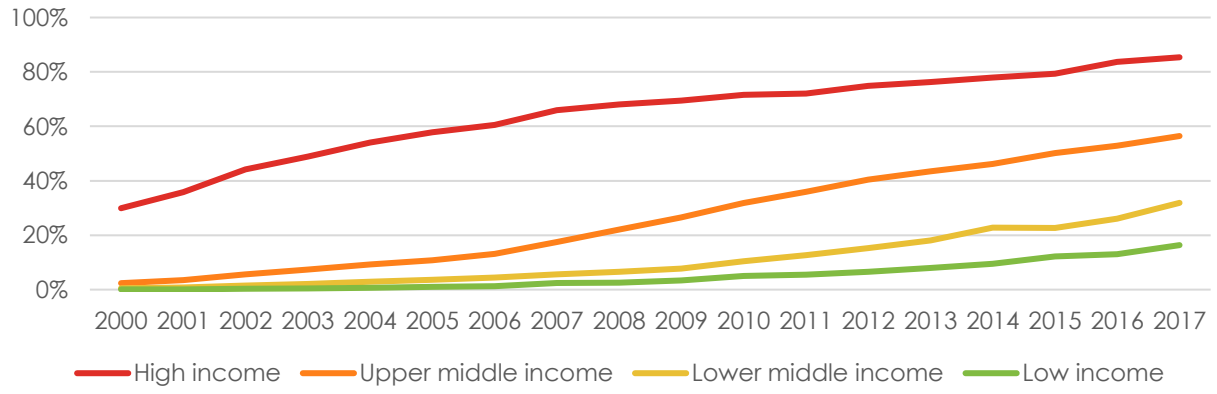
The high upfront costs, long lifecycles, and diffuse benefits produced by infrastructure can make it particularly challenging to finance. In general, these projects are funded through some combinations of government spending (from the general fund or targeted taxes); private-sector led investment, usually accompanied by user fees; and public-private partnerships (PPPs), which include a variety of different ways of combining public and private financing and involvement in infrastructure.

6.7. Digitalisation

New technologies may provide opportunities for developing countries to move into higher value sectors and activities without passing through the same stages as developed countries did in a process referred to as "leapfrogging". Falling costs make these technologies more accessible. Developing economies have been significantly affected in recent years by the adoption of new digital technologies with little delay (or even ahead of) their spread in wealthier countries. Mobile money systems, e-commerce, and the Internet of things have all found applications lower-income countries.

While digital technologies have been adopted quickly around the world, there are still considerable cross-country gaps in their use (Figure 19). In many developing countries, Internet users are often "mobile-first", meaning that users start with phones (and less often tablets) rather than computers. These tend to be lower cost devices and mobile infrastructure is relatively easier to expand. In fact, the growth in mobile broadband subscriptions over 2012-17 was faster in LDCs than in developed countries.

Figure 19. Percent of population using the Internet by country income group, 2000-17



Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Fostering digitalisation depends on improving skills, infrastructure, and the policy environment. Required skills include basic user skills and digital literacy, as well as specialist and developer skills for those creating and maintaining software and platforms. Supportive infrastructure includes the Internet backbone, fixed and mobile broadband, data and cloud computing facilities; end user equipment; and software platforms for e-commerce and other activities. Required policy reforms to encourage investment in digitalisation may include reforms or new legal and regulatory frameworks to clarify rules and reduce uncertainty, which can cover a wide range of policy areas. For example, e-commerce tends to be affected by policy on areas including electronic transactions, consumer protections, data protection/privacy, and cybercrime.

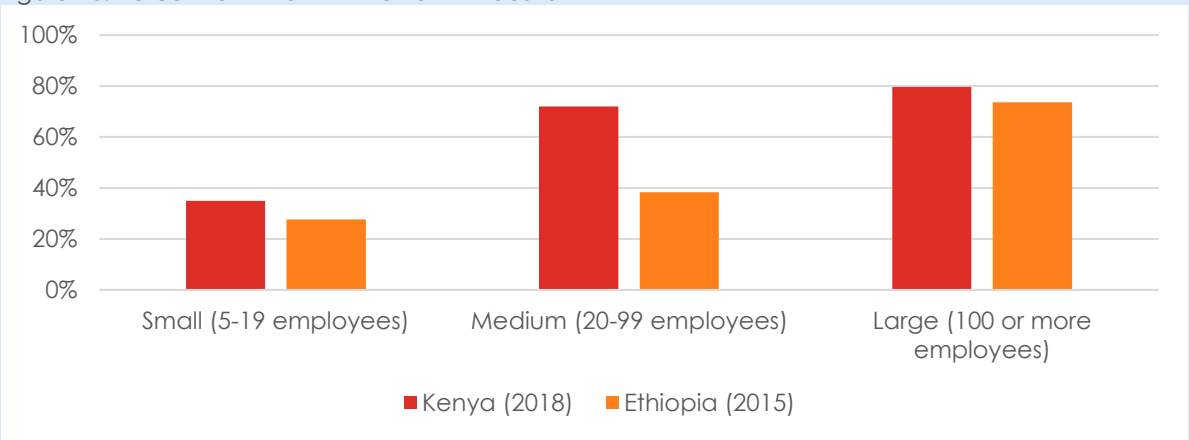
Resources: Enterprise Surveys

The World Bank's Enterprise Surveys are firm-level surveys of thousands of firms in more than 100 countries. In addition to firm characteristics and performance, Enterprise Surveys ask businesses about:

• Perspectives on obstacles faced • Corruption • Crime • Finance • Gender • Informality	• Infrastructure • Innovation and technology use • Management practices • Regulations and taxes • Trade • Workforce

The website includes a query tool than can be used to summarise survey data for specific subgroups for particular countries and years when survey rounds were conducted, in addition to generating reports by country or topic. For those used to working with microdata, the firm-level data can also be downloaded as .dta files. Using the custom query tool, try creating a figure comparing the percent of firms of different sizes that have their own website (under the "Innovation and technology" topic) in Kenya (2018 survey) and Ethiopia (2015 survey). The result should look like Figure 20.

Figure 20. Percent of firms with their own website



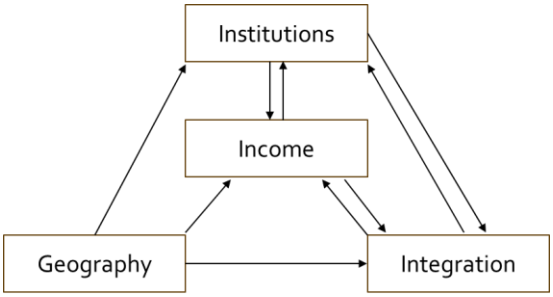
Source: **World Bank** (n.d.). *Enterprise Surveys*. World Bank. Washington, D.C. https://www.enterprisesurveys.org.

7. Governance and institutions

Governance refers to "the process through which state and nonstate actors interact to design and implement policies within a given set of formal and informal rules that shape and are shaped by power".[xiv] Governance directly benefits individuals' wellbeing by strengthening democratic representation and delivery of public services. It also affects growth prospects. Fundamental institutions like protection of property rights and rule of law are critical in attracting investment. Managing government budgets effectively is key to providing the macroeconomic conditions to support growth. Good governance and effective institutions are needed to design and implement economic policy, including addressing market failures. Non-economic factors that affect development (e.g. security) are also affected by governance.

Closely linked to the quality of governance is the quality of institutions. "Institutions" can refer to both organisations such as government ministries and agencies and, on a deeper level, to rules and norms that affect the behaviour of individuals and groups. For example, property rights and the rule of law can be thought of as institutions in the latter sense. Institutions are important to growth, though better institutions can also be an outcome of growth and higher income. Rodrik, Subramanian, and Trebbi's review of the impacts of institutions on development highlights the bidirectional relationships that connect institutions (which are also affected by geography) to income directly and through trade (or integration into the global economy) (Figure 1Figure 21).

Figure 21. Deep determinants of income



Source: **Rodrik, D., Subramanian, A. & F. Trebbi** (2002). "Institutions rule: The primacy of institutions over integration in economic development". *IMF Working Paper*. https://www.imf.org/external/pubs/ft/wp/2002/wp02189.pdf.

While the quality of governance and institutions have a large influence on economic development prospects, these concepts are not possible to measure directly as other indicators of interest are. Academic researchers often look for proxy measures, such as the use of settler mortality by Acemoglu, Johnson, and Robinson.[xv] Composite indices are also constructed and surveys used to measure aspects of governance and institutional quality. The World Bank's Worldwide Governance Indicators, for example, evaluate countries on six dimensions of governance, highlighting some of the issues commonly thought of when discussing governance:

- Voice and accountability (e.g. democracy, press freedom),

- Political stability and absence of violence (e.g. armed conflict, terrorism, social unrest),
- Government effectiveness (e.g. quality of bureaucracy, extent of administrative costs, quality of infrastructure and public services),
- Regulatory quality (e.g. extent of price controls, limitations on investment),
- Rule of law (e.g. extent of crime, efficiency of justice system, protection of property rights), and
- Control of corruption (e.g. extent of corruption and irregular payments).

Institutional reform programmes are often carried out alongside significant policy reform, and the effects of each can be difficult to distinguish from one another, though periods of institutional reform have certainly contributed to economic development, such as the Republic of Korea in the 1960s and China in the 1970s. Credible signals that governments are committed to the rule of law and protecting property rights are needed and may be even more important than reforms to law. For example, Rodrik et al. compare China, which lacks formal property rights, and Russia which has a formal system in place, noting that investors seem more comfortable in China, where they are more confident rights will be protected in practice.[xvi]

Institutional reform programmes may take on a variety of forms. Market-based approaches, such as those advocated for by the IMF, tend to call for reforms that include macroeconomic stabilisation (e.g. reducing inflation, managing spending and fiscal management), reduced size of the public sector, and good governance (e.g. transparency, administrative reform, reducing corruption, protection of freedoms, rule of law). Other approaches share similarities, but may differ in what they emphasise. For example, these may make fiscal constraint less of a priority while fostering capacity development, improving skills, including through international cooperation / aid may be prioritised as well. Increasingly, the implementation of digital solutions in government is an element of reform processes (Box 3).

Box 3. Forms of e-governance

Information and communication technologies (ICT) provide opportunities for improving services and lowering costs, though these need to be implemented with consideration of capacities for their use and fairness in access. E-government tools can be used in managing relationships between governments and citizens and businesses, as well as managing internal processes within government and relationships with public sector workers (Figure 22).

Figure 22. Forms of e-government

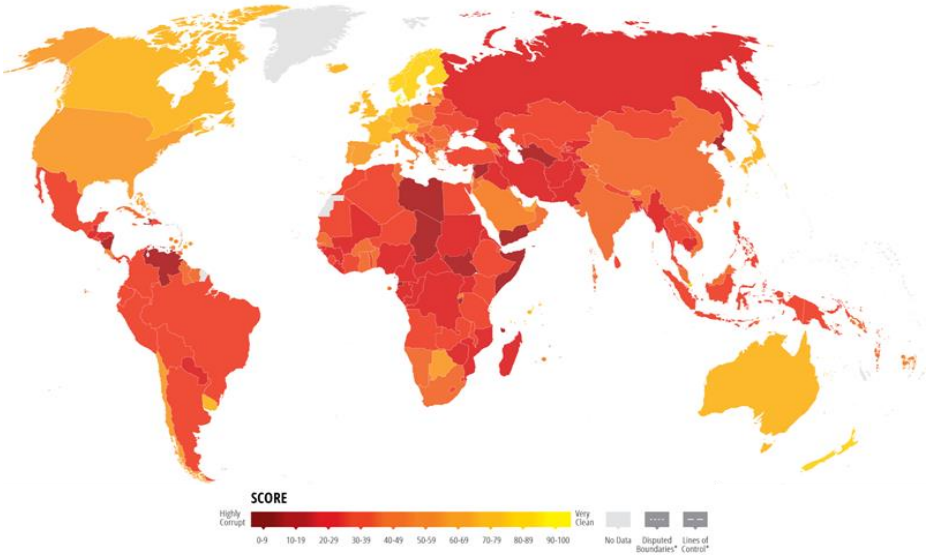
Government to citizen (G2C)	Government to business (G2B)	Government to government (G2G)	Government to employees (G2E)
• Provision of services online • E-payment of taxes, fees • Electronic records • Public opinion and consultation, voting • Transparency	• Licensing and approvals • Contracting and procurement • Management of subsidies and taxes • Information on policies, support programmes	• Budget management • Policy monitoring and implementation	• Training and management

7.1. Corruption

Public corruption undermines the effectiveness of institutions and trust in these institutions. Petty corruption takes place on small scale, between public officials and the general public. A typical example might be the bribery of customs officials to avoid paying tariffs or complying with trade regulations. This differs from grand corruption, which involved high-level public officials and the misuse of large amounts of public money or otherwise affects a large share of the population. Examples of grand corruption may thus include firms giving bribes to secure government contracts or large-scale obstruction of justice.

Like the quality of governance, the extent of corruption is made difficult to measure by its hidden nature. A widely-used indicator (though far from the only measure of corruption) is Transparency International's Corruption Perceptions Index (Figure 23). This Index ranks 180 countries and territories by their perceived levels of public sector corruption, according to surveyed experts and business people. It is subjective, being based on opinion, but produces similar results to other indicators that would suggest the presence of corruption, like excessive regulation. A look at country rankings suggests a negative relationship between corruption and a country's level of development – the top scoring countries are high-income economies. The direction of causation is not clear, as higher-income countries may have greater capacities to address corruption in addition to corruption contributing to or being associated with factors that hinder growth and development.

Figure 23. Corruption perceptions, 2022



Source: Transparency International (2022). *2022 Corruption Perceptions Index*. Transparency International. Berlin. https://www.transparency.org/en/cpi/2022.

Recommended measures for solving or preventing corruption differ with individuals' perspectives on the causes of corruption and drivers of development. Those favouring a market-based approach to development see excessive government intervention and regulation as a main cause of corruption, and suggest that markets are better than

governments at aligning social and private interests. The policies recommended by Transparency International are more moderate, including the following:

- Asset and interest declarations (requiring public officials to disclose private interests that might affect their decisions / actions),
- Beneficial ownership transparency (creating transparency on who owns and profits from firms),
- Transparency in political financing (establishing limits and disclosures on political donations to limit political influence),
- Whistleblowing (implementing protections for those who expose corruption, fraud, mismanagement, and other wrongdoing),
- Transparency in lobbying (establishing regulation and transparency on the lobbying of public officials), and
- Open contracting (requiring government contracts to be open by default, and prioritising transparency in procurement).[xvii]

Closely related to – and possibly overlapping with – the concept of corruption is that of capture, which refers to the ability of powerful groups to direct policies and state action to their own interests. In some cases, this can be difficult to distinguish from normal consultative policy making, which should involve open dialogue with affected stakeholders. It can come in three forms: state capture, which concerns the central government and is on a large scale; policy capture, which involves the design of particular policies and the planning process; and regulatory capture, which refers to the capture of regulators and agencies. Capture is especially concerning when the government is pursuing active policies to encourage growth and development, for example where powerful manufacturing sectors secure limits on imports to protect their position in the domestic market or where firms with government connections benefit from easier access to government-directed credit.

8. International trade and investment

Discussions on development cannot ignore countries' roles in the global economy. Exporting can be a driver of growth, allowing firms to benefit from access to larger markets and international flows of knowledge and technology. International investment flows similarly provide capital that can expand productive capacities in addition to enhancing economic dynamism.

8.1. Trade

Involvement in international trade can positively affect prospects for growth and development through several channels. Exporting can support growth where selling to international markets allows the most productive firms to expand. Trade can also lead to increased efficiency by increasing competitive pressure on firms. Consumers benefit from access to a wider range of goods and services, potentially at lower costs. And taking part in trade, international investment, and global value chains allows improved access to technology and knowledge.

At the same time, trade also involves risks. As argued by those advocating import substitution industrialisation (see 3.1. Import substitution industrialisation), declining terms of trade and the need to protect infant industries may prevent developing countries from benefitting from trade. New protectionism – the increasing use of non-tariff measures (NTMs) as barriers to trade – poses a further barrier to export-led development. And even where trade increases the overall size of the economy, these gains are not necessarily evenly distributed.

While differing perspectives on the importance of these benefits and risks lead to differing prescriptions on the ideal level of involvement in international trade, exporting is generally seen as at least an element of a successful growth strategy. Exporting accounts for a large share of economic activity in countries at all income levels (Figure 24).

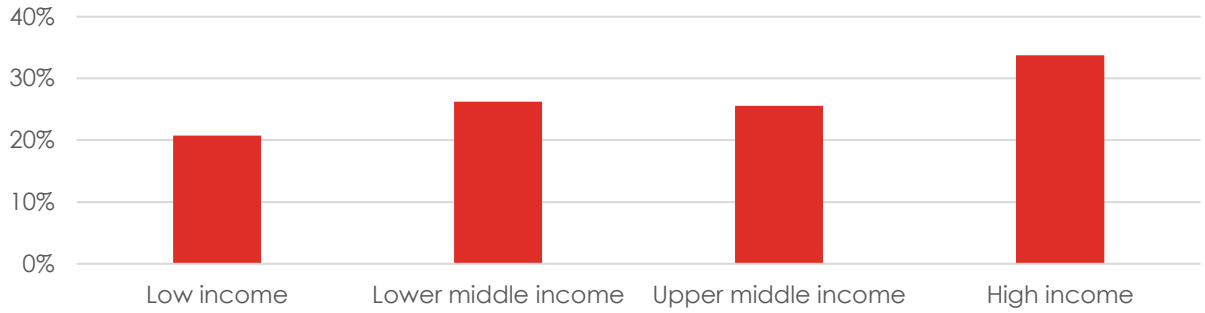
The traditional theory of international trade is based on the concept of countries having diverse comparative advantages. An economy has a comparative advantage in exporting a product if it can produce it at a lower opportunity cost than other economies. This means that even if a country is not the lowest-cost producer of a tradeable good or service, it can make sense to specialise in producing it for export. Comparative advantages are determined by a country's technology, factor endowments, preferences, and economies of scale.

Opportunity cost: Economists tend to think of costs not in terms of opportunity cost, which refers to the value of the best alternative choice that cannot be taken in order to do something. For example, the opportunity cost of using a building you own might be the potential revenue you don't earn from renting it to someone else. Opportunity cost in production measures how much of a good could be produced in terms of the other goods that could be produced with available resources.

Non-tariff measures: Tariffs are taxes that countries impose on international trade, which can be used to raise revenue for the government and to manage trade flows (often by limiting the flow of exports in order to provide an advantage to domestic producers). Non-tariff measures are other policy measures besides tariffs that can affect trade, such as protections on the health of people, animals, and plants; requirements on certification and testing; and labelling rules. These may be implemented in pursuit of legitimate goals,

such as protecting health or the environment, but can increase the costs of accessing the market and so protect a country's firms from international competition.

Figure 24. Exporting by country income group, 2022
Exports of goods and services as percent of GDP



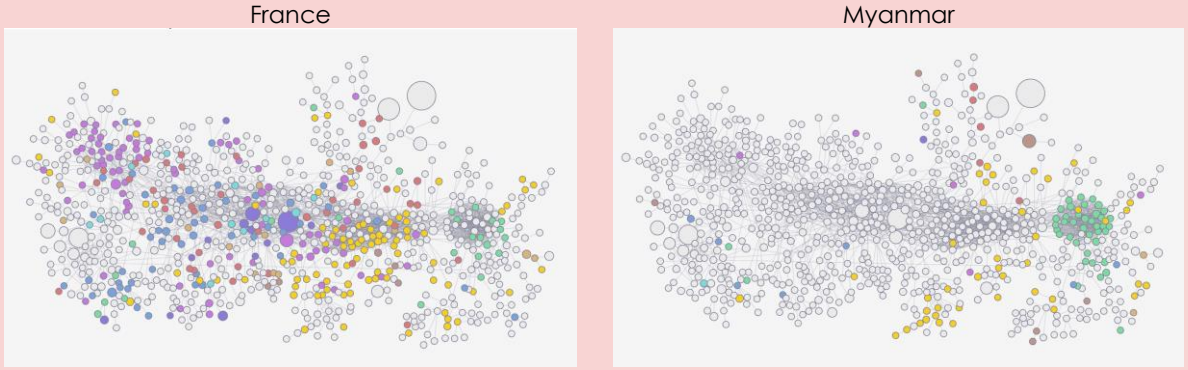
Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Development typically implies countries building on dynamic comparative advantages, including exporting new products by developing new strengths, such as by moving from exporting commodities to labour-intensive manufactured goods, and on to exporting higher value added products (Box 4). This export diversification is related to the process of structural transformation (see 6.1. Structural transformation).

Box 4. Product space visualisations of export diversification

The product space shows the connectedness of products in terms of similarities in production requirements and is a force directed graph. The means that products at the centre of the graph have more connections and tend to be more complex to produce. Advanced economies such as France tend to export products at the core, such as machinery, chemicals, and metal products (Figure 25). They also, however, export products at the periphery, like textiles, forest products, and animal agriculture. Lower income countries such as Myanmar tend to export goods at the periphery, such as agricultural products, minerals, and labour-intensive manufacturing goods like garments (the cluster on the right where Myanmar is particularly active).

Figure 25. Product space, 2018



Source: Growth Lab (n.d.). *Atlas of Economic Complexity*. Harvard University. Cambridge. https://atlas.cid.harvard.edu.

International trade is increasingly shaped by global value chains (GVCs), which distribute the stages of production across countries to take advantage of low costs in particular activities. For example, consumer electronics production typically involves design taking place in technologically-advanced economies while labour-intensive assembly takes

place in countries with low labour costs. GVCs account for almost 50% of global trade today and present opportunities for exporting from developing countries. Typically, these roles include the supply of commodities and limited manufacturing, while advanced manufacturing and innovative activities take place in developed economies. GVC participation requires openness to trade, low transportation costs and reliable logistics, and strong relationships between firms (typically with major roles of lead firms, which are often the final buyers).

Among other factors, export performance is shaped by trade policy. Unilateral trade policy involves decisions made by individual governments on the use of import protections, export promotion (e.g. targeted services, preferential tariffs, and preferential credit for exporters), and trade facilitation. Their scope for setting these policies is constrained by the international agreements the are members of – including both multilateral (World Trade Organization) and regional and bilateral trade agreements. Trade performance is not just the result of trade policy, however. Countries change their competitive advantages through investments in capital, education, and technology, and through regulatory and other changes the business environment

8.2. Investment

International financial flows take various forms, including foreign direct investment, remittances, official development assistance, private debt and portfolio equity. Foreign direct investment is particularly important because it is investment with ownership. It may be either through greenfield investment (the establishment of new productive capacities such as factories) or brownfield investment (the purchase of existing productive capacities) and differs from foreign portfolio investment (FPI), which refers to the purchase of securities and other financial assets by investors from another country.

There are a range of potential benefits of FDI for host countries receiving these investments. These occur directly and indirectly, through what are referred to as spillovers benefitting domestic firms. Inflows contribute to employment – particularly in manufacturing and services – and economic growth. Workers gain skills through experience and on-the-job training, which can benefit other firms when these workers take other jobs or start their own businesses. International firms often bring with them innovations in the form of newer financing tools, technologies, and operational practices that gradually spread to the local economy through imitation effects. Because FDI to developing countries is often motivated by taking advantage of local factors of production like low cost labour, foreign investment can increase exports and (because capital inflow provide foreign exchange) exchange rate stability.

FRI can also present challenges, including the loss of ownership advantage and crowding-out of-national firms. And even where it is beneficial, FDI's impact may be limited, as foreign investment sometimes creates enclave economies that are weakly linked to the rest of the country they are located in, especially where there are large gaps in technology and few domestic suppliers.

From the perspective of the investor, there are four motivations for investing abroad:

- **Natural resource seeking**: To secure access to commodities at low cost, with predictability, or higher-quality, which often motivates investment in developing countries.
- **Market seeking**: To supply markets, possibly by avoiding trade barriers, which may also be relevant in developing countries, though purchasing power tends to be limited in these economies.
- **Efficiency seeking**: To achieve economies of scale and diversify risk, which may motivate investment in developing countries by firms seeking low cost labour.
- **Strategic asset seeking**: To sustain long-term competitiveness, which tends to be least relevant in developing countries, as this relates more to firms seeking technology, brands, and managerial know-how.

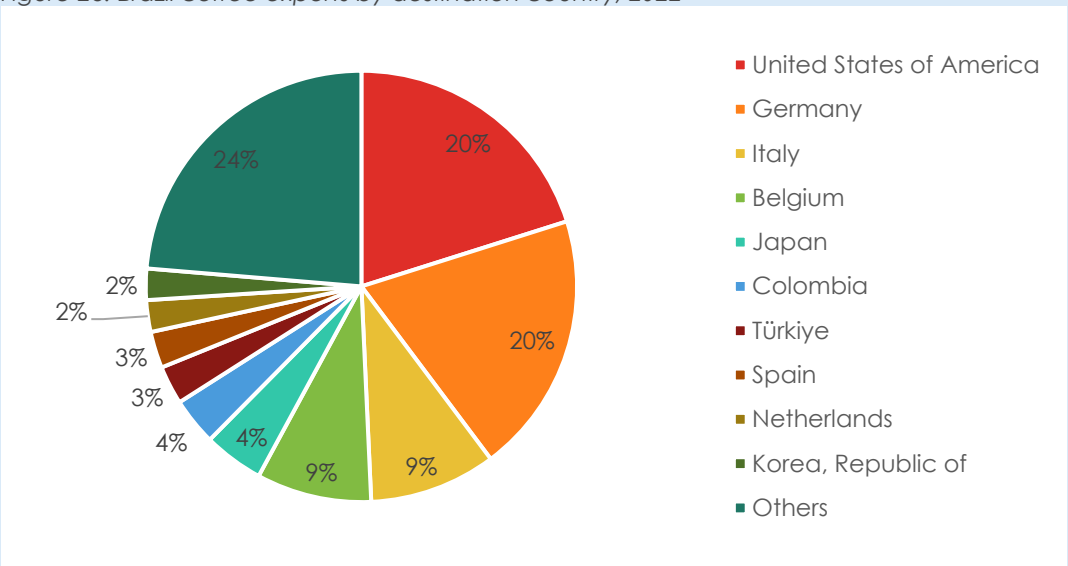
A wide rage of policies are relevant to attracting and leveraging investment. Since foreign firms will need to operate in the host country, the same factors that determine the success of local businesses – such as product and labour market regulations, infrastructure, workforce skills, etc. – are also considered by investors. Attractiveness to FDI is also shaped by FDI-specific rules, such as foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel, and operational restrictions (e.g. restrictions on branching and on capital repatriation or on land ownership). Because of the close ties between investment and trade, where foreign firms are reliant on imported inputs or produce for export, investment policy and promotion should be linked with trade development priorities and national development planning more generally.

Resources: Trade Map

Along with the UN Comtrade Database, ITC's Trade Map is one of the most useful sources of statistics on international trade flows. Statistics are available broken down by county of origin / destination (including total and bilateral trade). Trade statistics are categorised with a coding system that groups together similar products in a hierarchy. Many international statistics are coded using the Harmonized System (HS), which groups products into two digit, four digit, and six digit categories with increasing precision. For example, an apple is coded as 080810. The first two digits (08) refer to Chapter 8: Edible fruit and nuts, peel of citrus/melons. The first four digits (0808) refer to apples, pears and quinces, fresh. And the entire six digit string refers specifically to apples. After the first six digits, country-specific divisions of product type are added.

Try creating a figure showing the share of coffee (HS 0901) exports from Brazil in 2022 by destination country. It should look like Figure 26.

Figure 26. Brazil coffee exports by destination country, 2022



Source: **ITC** (n.d.). *Trade Map*. ITC. Geneva. https://www.trademap.org.

9. Poverty and inequality

Reducing poverty and managing inequalities are central goals in mainstream understandings of economic development. While global poverty rates are declining, the complexity of addressing these issues means that poverty and inequality remain challenges across much of the developing world. These challenges are only exacerbated by the effects of climate change that disproportionality affect vulnerable groups.

9.1. Measuring poverty

While defining and measuring poverty may seem to be straightforward tasks, these raise inherently political questions without clear answers, such as whether or not poverty is simply a material issue, if measures need to be specific or universal, the unit of measurement, and over what timeline poverty should be measures. Four approaches to answering these questions consider poverty in terms of monetary income or wealth, capabilities, social exclusion, and participation (Figure 24). These distinctions are important; empirical research shows that there can be significant differences in who is categorised as poor by these different approaches.

Figure 27. Approaches to defining and measuring poverty

Monetary • Most common approach • Compares income or consumption to a poverty line (either relative or absolute), at market prices • Either assumes money is a fair measure of utility, or a poxy for other aspects of wellbeing	**Capabilities** • Pioneered by Amartya Sen, based on freedom to achieve certain basic capabilities • Unclear exactly how to define basic needs, but may cover issues like health, education, political freedoms, environment, etc.
Social exclusion • Poverty is defined as exclusion from normal participation in their society • Multidimensional, including exclusion from health services, education, water and sanitation, housing, etc. • Included in EU policymaking	**Participatory** • Includes the poor in defining poverty • Initially used at project level, later in PRSPs • Challenging to combine different perspectives into one view

Source: **Ruggeri-Laderchi, C., Saith, R. & F. Stewart** (2003). "Does it matter that we do not agree on the definition of poverty? A comparison of four approaches". *Oxford Development Studies*. Vol. 31. No. 3. https://www.ophi.org.uk/wp-content/uploads/ssRuggeri-Laderchi-Saith-Stewart-2003.pdf.

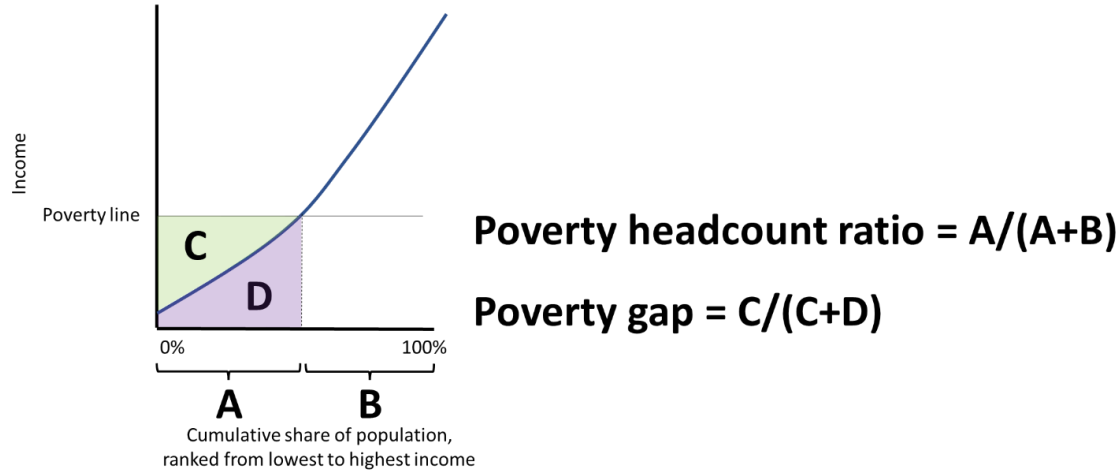
Much of the academic and policy discussions of poverty still focuses on monetary approaches that are clearly-defined and internationally-comparable. There are, however, and increasing number of alternative measures of poverty. One alternative measure particularly worth noting is the Multidimensional Poverty Index, from the University of Oxford and UNDP. It is calculated at the household level, measuring deprivation on 10 indicators of health, education, and standard of living. The depravation experienced by individuals on each indicator is measured and weighted so

that each of the three dimensions is given equal importance. The global MPI defines the poor as those with a deprivation score of one third or higher.[xviii]

Many monetary approaches define as poor anyone with income or consumption below a set poverty line. National poverty lines are set by individual countries, usually reflecting the costs of basic needs (e.g. food, clothing, shelter). The global poverty line was established based on the national poverty lines of a group of poor countries as a measure of extreme poverty. Since 2022, the global poverty line has been set at US$ 2.15 per person per day in 2017 prices (PPP).

Two common measures of the extent of poverty in a country or within some other group of people are the headcount ratio and poverty gap. The most commonly used, the headcount ratio, measures the percent of the population living on income less than the poverty line. The poverty gap, in contrast, is used to give us more information about those living below the poverty line. It tells us the average distance from the poverty line for the poor (Figure 28)

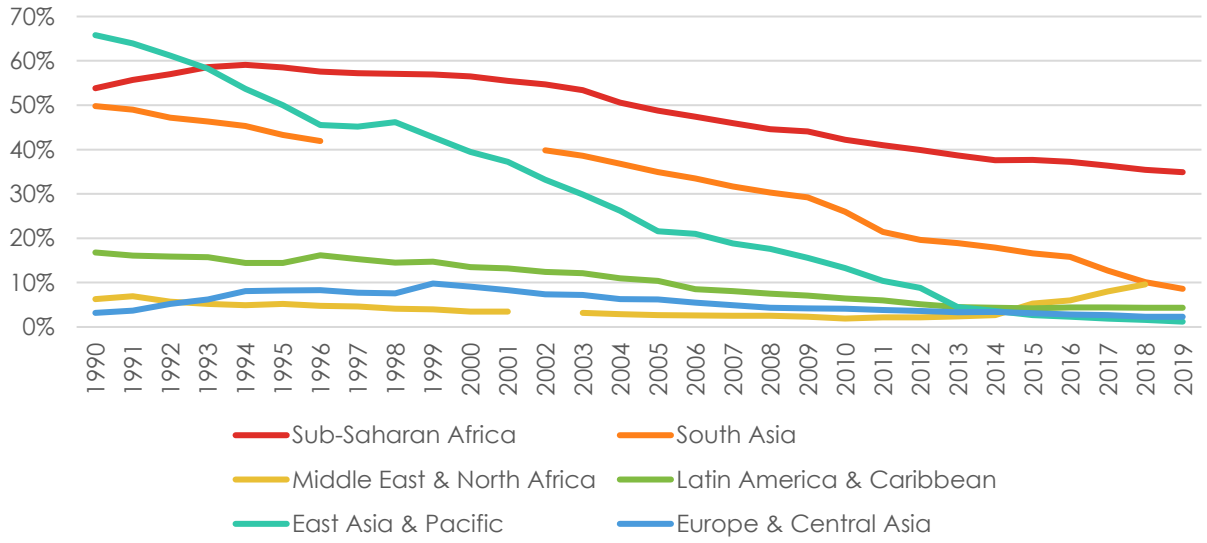
Figure 28. Poverty gap definition



9.2. Poverty and development

Poverty is falling around the word. There are fewer poor as a share of the global population, partly as a result of economic development in the world's two most populous countries. China's growth and reduction in poverty has been significant, accounting for much of the decline in East Asia and the Pacific (Figure 29). India has also driven some of the global decline, as seen in the drop in poverty rates in South Asia. Sub-Saharan Africa still has the highest poverty rates, despite moderate declines in the 2000s. Rural-urban, gender, and age differences in are important dimensions of poverty within countries.

Figure 29. Poverty headcount ratio by region, 1990-2019
Percent of population living on less than at $2.15 a day (2017 PPP)



Source: **World Bank** (n.d.). *World Development Indicators*. World Bank. Washington, D.C. https://databank.worldbank.org/source/world-development-indicators.

Rural residents are more likely to be poor than city dwellers; 80% of the global poor are rural, though only about half of the global population is rural. Rural areas are often less integrated in processes of economic development, leading to lower incomes in rural areas, poverty, and rural-urban migration. Rural-urban migration is often part of development and structural transformation. However, rapid urbanisation can pose challenges for cities to accommodate sudden growth in population, requiring expanding housing, infrastructure, transportation systems. Rural migrants may be denied access to some services in cities, such as in China's hukou system, which defines where an individual has access to services like health and education and is challenging for rural-urban migrants to switch to their new cities of residence.

Rural development is often key to inclusive growth and poverty reduction, and can help to manage rural-urban migration pressure. Solutions often involve improving agricultural productivity through increasing mechanisation and using improved inputs, as well as producing higher value products. Skills, access to finance, and sector organisation and policy are key levers in fostering this change. Other solutions involve diversifying rural economies by growing sectors related to agriculture and others activities, as well as improving investment and developing human capital. The challenges in achieving rural development are heightened, however, by the often higher cost per person of extending services and infrastructure to less densely populated rural areas.

Women are slightly overrepresented among the poor globally and also across most regions of the world. In particular, East Asia and Pacific, South Asia, and Sub-Saharan Africa have high female poverty. Gender differences are greatest among the young – girls are more likely than boys to be overrepresented among the poor, as are women in their main reproductive years (ages 25–34) across most world regions. Indeed, some

drivers of poverty affect women in particular. Rules and practices about inheritance and ownership of land and other assets often discriminate against women. Women farmers without legal rights to land may face greater barriers in accessing finance and other needs because they lack collateral. Gender norms (culture) might limit where women work, or how they interact with others (e.g. women owned businesses not having the same networks to benefit from). And within families, more resources (from food to education) may be directed towards boys if they are seen as the potential earners of high income who can support the family in future.

Children and young people are often disproportionately affected by poverty as well. Children are twice as likely to live in poverty than adults. Young adults also account for a large share of the global poor, as there is often a lack of economic opportunities and support for them. Many of these are found in Africa, where many countries have both young populations and stagnant growth.

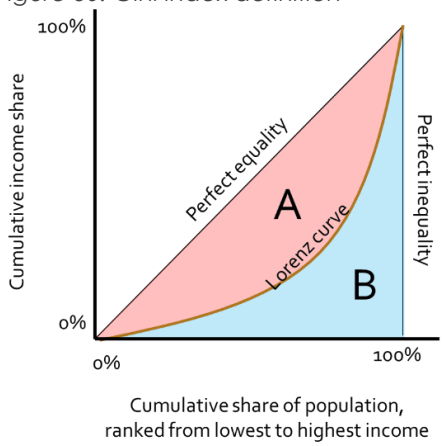
9.3. Measuring inequality

While there are many forms of inequality relevant to discussions of economic development, particular attention is paid to income inequalities. There are still several ways of describing income inequalities, including visualisations of distributions such as histograms and kernel distributions; separation and comparison of income quartiles, quintiles, and deciles, etc.; and indices such as Gini and Theil.

The most commonly used indicator of income inequality is the Gini index (sometimes also referred to as the Gini coefficient or ratio), which measures the level of inequality in a country, region, or among another group of people on a scale of 0 (representing perfect equality) and 100 (representing perfect inequality).[xix] These extremes are defined mathematically and are next to impossible to imagine ever being found in the real world. Instead, almost all countries in the world fall somewhere between 25 and 65. The advantage of using the Gini index to measure inequality is that it offers a single number that summarises inequality, easing comparisons between countries and over periods of time.

The Gini index is measured using the Lorenz curve, which plots the cumulative percentage of total income in a population against the cumulative percentage of population, ranked by their share of total income (Figure 30). The more this curve deviates from a straight line representing a perfectly equal society where everyone has the same income, the greater the inequality of the distribution of income in the society.

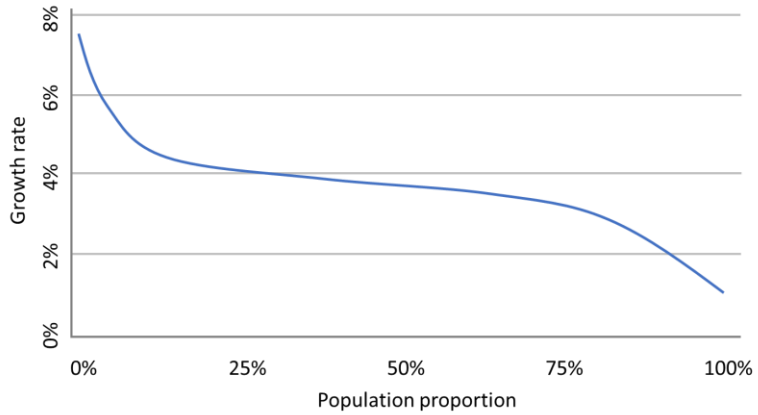
Figure 30. Gini index definition



Gini = (A/(A+B))*100

In order to study changes in income over time by income group, we might use a growth incidence curve (GIC). This is an illustration of the growth rate of per capita income for every percentile of the income distribution between two points in time. The GIC in Figure 31 of a hypothetical country, for example, shows relatively high rates of growth over the time period in question for the poorest percentiles of the population, and much lower rates of income growth for the richest percentiles. This figure therefore describes a society with declining inequality.

Figure 31. Example growth incidence curve



9.4. Inequality and development

Inequality matters to development for intrinsic reasons; economic growth does not support widespread improvements in wellbeing if only those who are already wealthy experience increases in income. There are also functional concerns to consider, in terms of how inequality affects growth. If financial markets worked perfectly, the poor could borrow and invest in education or in opening businesses, enhancing their productivity and income. Instead, financial markets never work perfectly and are especially difficult for the poor in developing countries to access, since they lack collateral. As a result, low incomes in unequal societies hinder growth. This situation also exacerbates inequality, since the poor remain in low-skilled work, keeping these wages low and the profits from

owning capital high. On the other hand, inequality may actually encourage growth when the wealthier save more, driving growth, or where inequality motivates economic activity.

A widely-referenced but empirically questionable relationship between inequality and development is put forward with the Kuznets curve, a hypothesised inverted u-shaped relationship between income level and inequality, meaning that low-income economies have low levels of inequality but that inequality increases as incomes grow before decreasing again as the economy reaches a high level of income. The story behind this relationship tends to highlight how low-income societies are largely agricultural, with little potential for inequality; economic growth creates opportunities for investors, while large pools of labour keep wages down for workers; and in higher-income societies, there are greater investments in education and social programmes, and wages start to rise, reducing inequality. However, this relationship was originally identified in reference to countries at different levels of development in Latin America, not in looking at the evolution of inequality over time in particular countries. And other regions, such as East Asia, have seen rapid growth without necessarily displaying this kind of change in inequality.

There are other theories on the relationships between development and inequality. Thomas Picketty, for example, argues that increased wealth inequality is the result of the rate of return on capital (or profits) exceeding the income growth rate. As noted in UNDP's *Human Development Report*, higher labour productivity is associated with reduced labour income inequality where these gains in productivity are widely distributed and not concentrated among those with the highest levels of income.[xx]

Generally speaking, policy responses attempting to limit inequality fall into three categories: premarket, in-market, and post-market. Pre-market policies are implemented to prevent inequalities from arising in the first place, such as improved access to education for poor families. In-market policies affect incomes and opportunities in work. Post-market policies attempt to address inequalities through redistribution and may interact with other policies, such as taxes on high income earners that are used to fund public education.

9.5 Poverty, inequalities, and climate risks

Developing countries less responsible for climate change, but are more affected by it because of geography and weaker adaptation capacities. While developed countries represent 12% of the world's population, they account for 50% of cumulative emissions of greenhouse gases according to World Bank estimates. Low-income countries suffer more damage from climate change effects -- losses from weather related disasters during 1995-2015 accounted for 5 percent of the GDP of the low-income countries, as compared to only 0.2 percent for the high-income countries.

Risk is a function of hazard, exposure, and vulnerability. Hazard refers to how dangerous is the event or trend (e.g. storms, flooding, increasing temperatures, increasing soil salinity). Exposure refers to how many people, what infrastructure, and what assets are in

the affected area. Vulnerability refers to how those exposed to the hazard are affected, and what resources affected people have to react and recover.

Hazard, exposure, and vulnerability of climate risks are often highest for the poorest populations in developing countries. A significant part of the population in developing regions live in low-elevation coastal zone and flood plains, and their number is increasing in both absolute terms and as proportion of the population, and so are more exposed to flooding and extreme weather events. Poorer groups often live in risky areas because they cannot afford to live in safer areas, and because many of these areas are rural, which has higher levels of poverty.

Climate change risks and inequality and poverty creates a vicious cycle through disadvantaged groups' exposure to climate risks (e.g. flooding, extreme weather, erosion, salinity, mudslides), susceptibility to damage from these risks (e.g. diseases spread with climate hazards, reliance on foods with volatile prices), and limited capacities to respond (e.g. fewer personal savings, lack of insurance, weakened communal assets). These result in greater inequalities and reduced capacities for the poorest to invest in greater climate resilience (such as by purchasing insurance), further increasing their climate risks.[xxi]

10. Development assistance

External assistance can complement national development efforts, supplementing investment from the public and private sectors and providing investment in otherwise neglected areas. Much of this assistance is framed in terms of supporting progress on the Sustainable Development Goals (SDGs), which replaced the Millenium Development Goals (MDGs) in 2015 (Box 5). The scale of aid flows and the design of assistance programmes affects how this assistance contributes to development.

Box 5. MDGs and SDGs

The Millennium Development Goals consisted of eight global development objectives set for the year 2015, agreed upon by all 191 United Nations member nations. While certain objectives, such as decreasing child and maternal mortality rates, were not attained, others, like reducing the percentage of individuals living in extreme poverty by half, were successfully achieved. On the whole, the MDGs had significant success in concentrating efforts on crucial issues. Although it remains a matter of debate as to how much the MDGs themselves contributed in some instances, they undeniably brought heightened visibility to vital concerns.

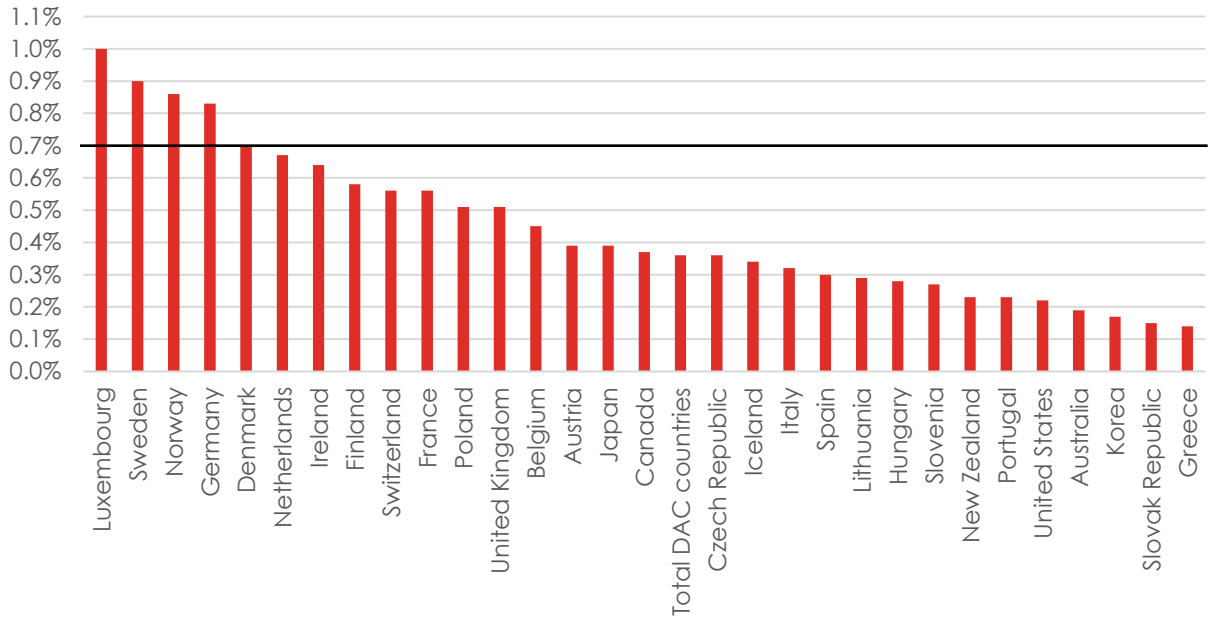
The Sustainable Development Goals, or Global Goals, are a set of 17 interconnected goals conceived as a "roadmap towards a superior and more sustainable future for everyone". Established by the United Nations General Assembly in 2015, the SDGs are aimed to be realised by 2030. Some criticism has been directed at the SDGs for their perceived complexity and the potential dispersion of focus; however, proponents argue that the complex nature of the issues at hand justifies the approach. The total cost of meeting the SDGs could amount to $400 billion annually until 2030.

10.1. International cooperation on development

To qualify as official Development Assistance (ODA), aid must be is furnished by official entities, encompassing state (and sometimes local) administrations, or by their executive agencies. Every transaction under ODA is supposed to prioritise the promotion of economic progress and the welfare of developing nations as its principal objective. Furthermore, ODA is to be concessional in nature and carries a minimum grant element of 25 percent, computed at a discount rate of 10 percent. Motivations for ODA include doing good (e.g. reducing poverty), political and strategic considerations, historical motivations and ties (e.g. to former colonies), managing transborder issues (environment and climate change, health and disease, crime and terrorism, migration), and trade and investment (global or bilateral ties).

Over time, ODA from the OECD's Development Assistance Committee (DAC) members – traditionally the major donor countries – has grown in absolute terms (even accounting for inflation), but has generally declined as a share of GNI in donor countries. Few countries meet the target of providing ODA of at least 0.7% of GNI per year (Figure 32). Furthermore, a significant share of aid is tied, meaning that it limits procurement to companies in the donor country or another small group of countries, potentially raising costs or limiting effectiveness. According to OECD data, 21.4% of bilateral ODA commitments by DAC member countries in 2021 was tied.[xxii]

Figure 32. Official development assistance by DAC members, 2022
ODA as percent of GNI



Source: **OECD** (2023). Official Development Assistance (ODA) in 2022. OECD. Paris. https://public.flourish.studio/story/1882344.

In addition to bilateral aid flows, a lot of financing for development projects – infrastructure, health, education, etc. – comes through development banks. Multilateral development banks include the World Bank and regional banks (e.g. Asian Development Bank, Inter-American Development Bank, African Development Bank). They support development by providing financing for longer-term development projects (through market rate loans, reduced rate loans, and grants) and technical assistance. Their role contrasts with other international financial institutions, such as the IMF, that typically work for short-term financial stability, though there are overlapping areas of work in both.

Developing countries are not just recipients of assistance, but also providers of assistance to other countries. South-south cooperation is an important element of international cooperation on development, typically based on technical assistance and cooperation between developing countries. It takes place through states, international organisations, academics, civil society and the private sector and involves sharing knowledge and best practices on economic and social development, as well as political and environmental issues. South-south cooperation with the involvement of actors from developed countries is described as triangular cooperation, often including financial support from the wealthier partner and technical assistance from other partners.

10.2. Designing and evaluating interventions

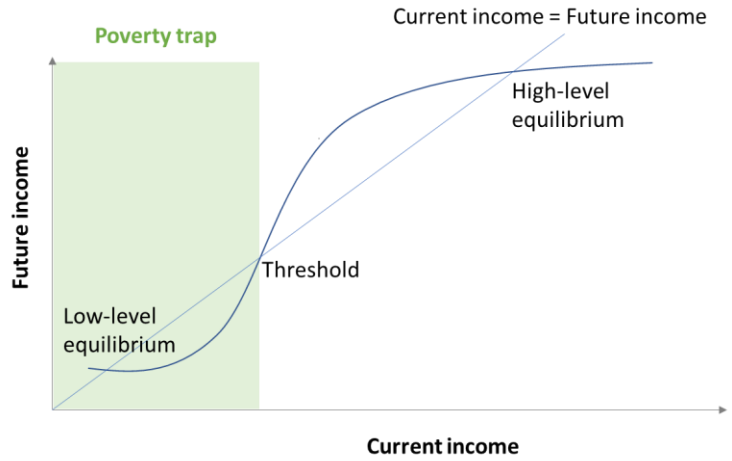
Even if targets on aid were being met, it isn't entirely clear how the interventions they fund and the interventions funded directly by government should be designed and implemented to be most effective. This debate is a part of the larger discussion on the proper roles of states and markets in guiding economic development. William Easterly

splits those working on development into two groups: planners (e.g. Jeffrey Sachs), who try to identify and supply what is needed, often funded by foreign aid or government spending, and searchers (e.g. Easterly), who believe that free markets (backed by good institutions) are better means of delivering what the poor need – that demand is overlooked otherwise.[xxiii] These two perspectives have been given other names by different authors, including Banerjee and Duflo's supply wallahs and demand wallahs.[xxiv]

The planner approach tends to be based on the idea that those in poverty are trapped and in need for large investments. A famous debate over how to distribute bed nets to slow the spread of malaria highlights the differences in these two approaches. Planners point out the returns to reducing malaria infections (and externalities in disease prevention), and call for bed nets to be distributed free, at least at first. Searchers say that bed nets will be distributed where needed by markets, and that users will only value them if they pay for them (though possibly at a subsidised price).

Many planners call for a big push – a large and temporary increase in foreign aid – necessitated by poverty traps that hold back less developed countries. The logic of the poverty trap is illustrated in Figure 33, which shares similarities with the multiple equilibria model of economic growth (see 4.3.5. Endogenous growth theory and multiple equilibria). The curved line shows the relationship between current and future income. Its shape describes a situation where investment that does not push current income past the threshold is bound to be wasted because the economy settles again at the low-level equilibrium. In contrast, large investments that push current income past the threshold eventually move the economy to the high-level equilibrium. The logic for the need for a big push of foreign aid to escape a poverty trap is that, beginning from a low level equilibrium, some external force is needed to push the economy past the threshold point, after which the positive returns to investment should make growth self-sustaining.

Figure 33. Poverty traps and multiple equilibria



The searcher perspective criticises this model, noting that poor countries have grown and escaped apparent traps. They see the focus on poverty traps as being tautological. Instead, they see a relationship between current and future income where even small increases in investment increase future income, though with diminishing marginal returns.

Easterly conceptually links the planners calling for foreign aid driven development to centrally planned economics. He claims there is a lack of feedback and accountability to planners, noting shortcomings in MDG achievement in particular. Easterly doesn't deny that aid isn't useful, but says incentives need to be considered. Others, like Dambisa Moyo, have made similar warnings about aid dependence in recipient countries.

These theoretical differences highlight the need for empirical evidence on what makes development interventions effective. Increasingly, this evidence comes from randomised control trials (RCTs). RCTs randomly assign beneficiaries to treatment groups (that receive the intervention) and control groups (that do not receive the intervention) in order to isolate the effects of the treatment on the group being studied, to make a causal inference on the treatment being responsible for a particular outcome. Simple comparisons may be affected by selection bias and other influences unrelated to the intervention being studied.

For example, to test whether giving textbooks to schools improves student performance, there is a risk of selection bias in comparing students at schools with more and fewer textbooks available if schools that perform better anyway also invest in books. Instead, by randomly deciding which schools do and don't get textbooks, these other effects are controlled for. With a large enough sample size, schools should only differ on average by whether or not they received textbooks. A study of this question described by Duflo et al., shows that – at least when introduced by themselves – new inputs like textbooks don't seem to help improve outcomes very much.[xxv]

RCTs may be incorporated as part of a gradual roll out (e.g. randomly choosing a group of households/communities to receive CCTs first and measuring results before proceeding). While RCTs are seen as the best form of evaluation, they are not always possible – other approaches may be needed, such as quasi-experimental approaches (e.g. difference-in-differences comparing between similar cases, regression discontinuity looking for sudden changes following a treatment).

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[ii] For an illustration of this process, have a look at this interactive chart and how the estimated distribution of income across the countries and regions of the world has changed since 1800: **Gapminder** (n.d.). *Population by Income*. Gapminder. Stockholm. https://t.ly/upf4x.

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