Development Economics Toolkit

Humphrey Fellowship

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Welcome to the Humphrey Fellowship toolkit on Development Economics. A partnership between Duke University, the United States Department of State, and the Institute for International Education (IIE), this toolkit aims to empower practitioners around the world, allowing them to understand how they fit into their country's overall development.

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The Power of International Education

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Why Development Economics?

Understanding the core principles of economics is critical to sustainable and long-term development. Whether you are working on health, education, infrastructure, or governance, your work fits into a larger story of economic development. Healthier workers are more productive, smarter business owners are more entrepreneurial, better roads open new markets, and more efficient government helps coordinate disparate initiatives. Economics provides a unifying framework that helps us understand how intersecting policies will influence the choices of individuals and businesses. We use these frameworks to generate valuable evidence so policymakers and practitioners can make smarter decisions about where to invest precious resources and, most importantly, improve lives.

Explore & Learn

This toolkit's content has been curated and designed by experts at Duke University' Center for International Development. While you review the toolkit's four interactive modules, make sure to explore the external links to real-world data, expert videos with Duke faculty, and many other resources.

Micro & Macro Economic Principles

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Micro & Macro Economic Principles

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Microeconomics Principles

How do markets influence individual and firm decisions?

Economics is the study of how people and organizations allocate scarce resources among competing and unlimited demands.

Given that scarcity exists, people must make tradeoffs. Microeconomics studies how people choose to allocate their scarce resources (labor, land, capital, time, etc.), how these choices are driven by incentives, and how policies affect incentives and outcomes.

What is microeconomics?

Microeconomics is the branch of economics that focuses on actions of particular agents within the economy, like households, workers, and businesses.

Microeconomics can help answer some of these typical questions.

Individuals

- What determines how households and individuals spend their budgets?
- How do consumers determine the best combination of goods and services to meet their needs and wants, given the budget they have to spend?

Firms & Businesses

- What determines the products, and how many of each, a firm will produce and sell?
  - What determines what prices a firm will charge?
- How does a firm decide to expand, downsize, or even close?

To understand how policies impact markets, we need to understand the market itself

There are two sides to each market.

Demand Side - Buyers

Buyers will buy fewer units of a good as prices rise.

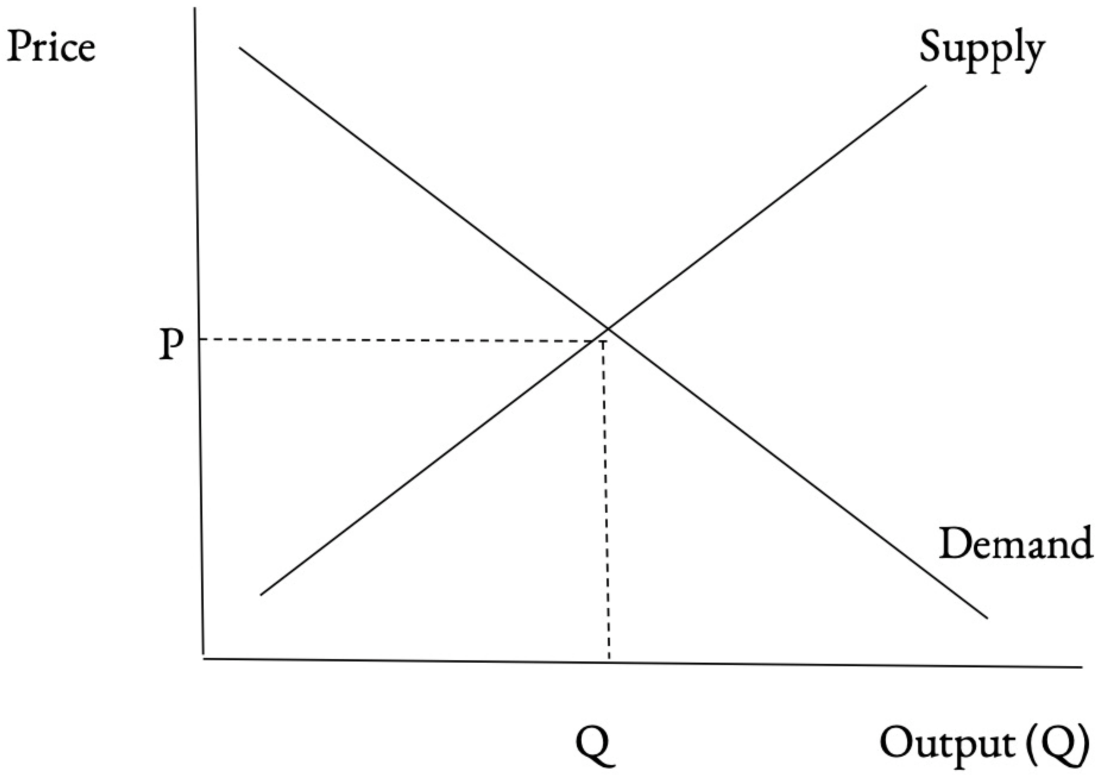
Price ↑ Quantity Purchased ↓

Supply Side - Sellers

Sellers will bring more product to the market when prices rise.

Price ↑ Quantity Sold ↑

Interactions between buyers and sellers establish a *market equilibrium*



Market Equilibrium

When prices go up, the quantity supplied goes up (upward-sloping supply curve) while the quantity demanded goes down (downward-sloping demand curve).

The market price settles at ***P*** where the quantity demanded balances the quantity supplied at **Q**. This is known as the ***market equilibrium.***

Markets can undergo upsetting shocks that affect prices and availability of goods

Deep Dive: Market Shocks

Prof. Corinne (Cory) Krupp

Cory Krupp is an economist and a Professor of the Practice of Public Policy in the Sanford School. She has taught courses on International Trade and Policy, Economic Foundations of Development, Microeconomic Policy Tools, European Union Trade and Finance Issues, and Macroeconomic Policy and International Finance. Prof. Krupp also serves as the Associate Dean of Academic Programs at the Sanford School, with responsibility for curriculum development for the school's main programs.

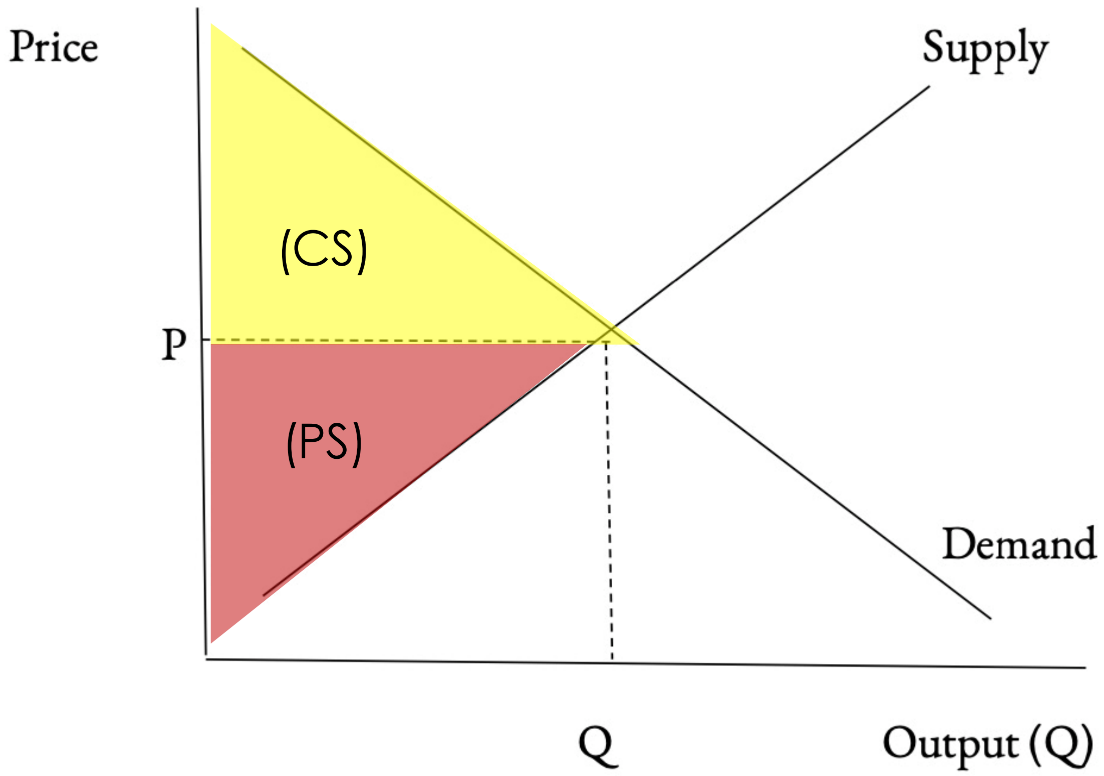
Understanding who benefits from a market equilibrium is key to understanding policy impact

Consumer Surplus (CS)

Definition: How much more consumers would be willing to pay for a good than its market price P. Since the demand curve represents consumer's willingness to pay, the yellow area under the demand curve between its top and the market price represents aggregate CS.

Producer Surplus (PS)

Definition: How much more producers earn above the cost of bringing the good to the market. Since the supply curve represents producers' minimum cost, the red area between the supply curve and the equilibrium price represents aggregate PS.

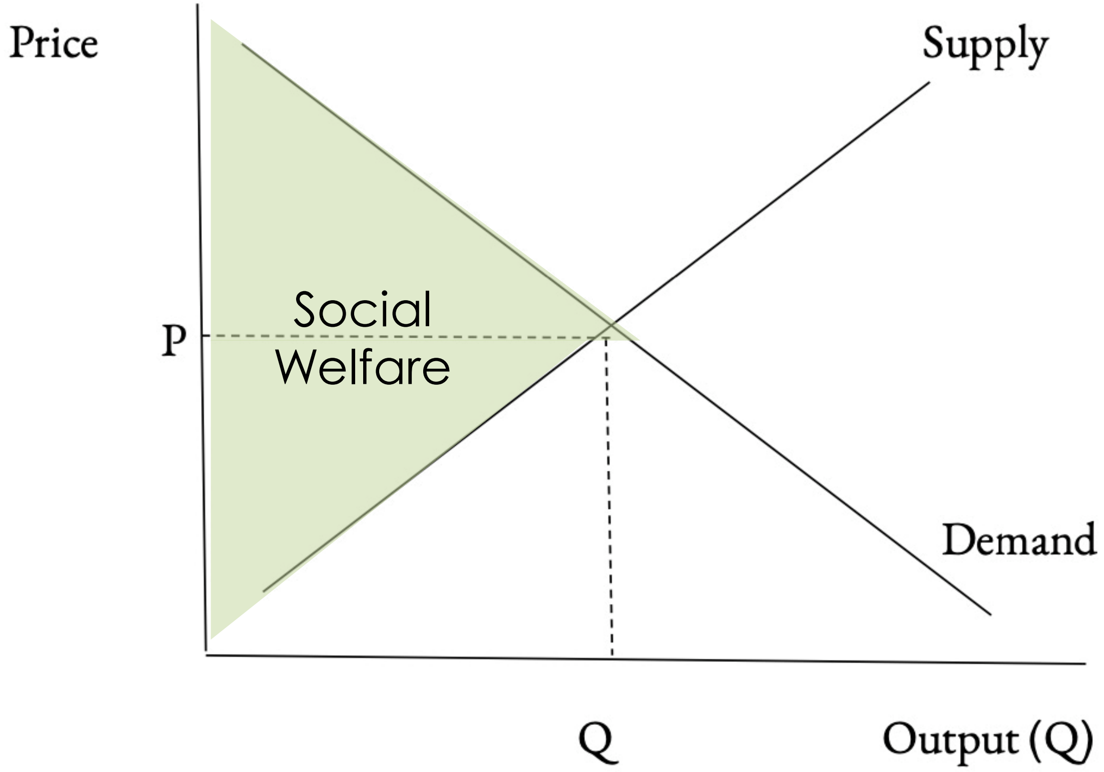


The combined benefit to both consumers and producers is known as *Social Welfare*

Social Welfare

Social welfare is maximized in a well-functioning competitive market, and it shrinks in the presence of market or government failures.

Monitoring the social welfare of the market can inform a government if intervention is needed to improve social welfare and benefit the market participants.



Our understanding of market prices and quantities assume functioning markets

Functioning markets require active competition

Competitive Market

Competitive markets are dynamic, since firms must keep innovating and creating new varieties to compete with each other. Competitive markets often exhibit the following:

- Producers produce very similar products
- No individual firm can impact the market price or quantity – ***Price-Takers***
- Producers are small relative to the market size
- New producers can easily enter the market

Non-Competitive Market

Non-competitive markets are dominated by one or only a few firms. These markets often exhibit the following:

- Firms have the power to set price in the market – ***Price Makers***
- Entry conditions are expensive or complex, so new entrants are very rare
- Existing firms can maintain high prices without fear of competition
- The number of transactions tends to be smaller, prices are higher, and choices more limited for consumers

Without competition, markets will not maximize social welfare and consumers can be harmed.

In non-competitive markets, governments often use regulation to ensure that consumers are not unduly harmed.

Example Pro-Competition Policies

- Antitrust policies that forbid mergers that significantly reduce competition
- Punish price-fixing and anti-competitive agreements among firms that block entry
- Require monopolies (e.g. energy utilities) to serve the entire market at prices set by the government.

Deep Dive: Market Competition

Market competition varies widely depending on the overall economic environment, the regulatory environment, and a country's institutional capacity. In many developing countries, state-owned enterprises often complicate market reforms.

Read more about the World Bank's work on market competition and development here.

Microeconomics Principles

How can public policy affect individuals and firms?

In an ideal market-based economy, allocations are based on prices and the profit motive with private ownership of resources.

However, the market-based economy is not always efficient. In the next section, we will look at several government tools and policies that address inefficiency in market economies.

Government intervention can help when there are *market failures*

Besides lack of competition, markets sometimes fail due to several factors:

Externalities
Costs that are not priced into a market that harm consumers or other third party

Asymmetric Information
One party has more information than the other, giving them an advantage

Factor immobility
Labor or capital are unable to reallocate to new activities.

Two of the largest government responses are the following:

Price Regulations

- *Price Floors*
- *Price Ceilings*

Financial Interventions

- *Consumption Taxes*
- *Subsidies*

Governments often establish price floors to protect individual workers and suppliers

Price Floors

Problem

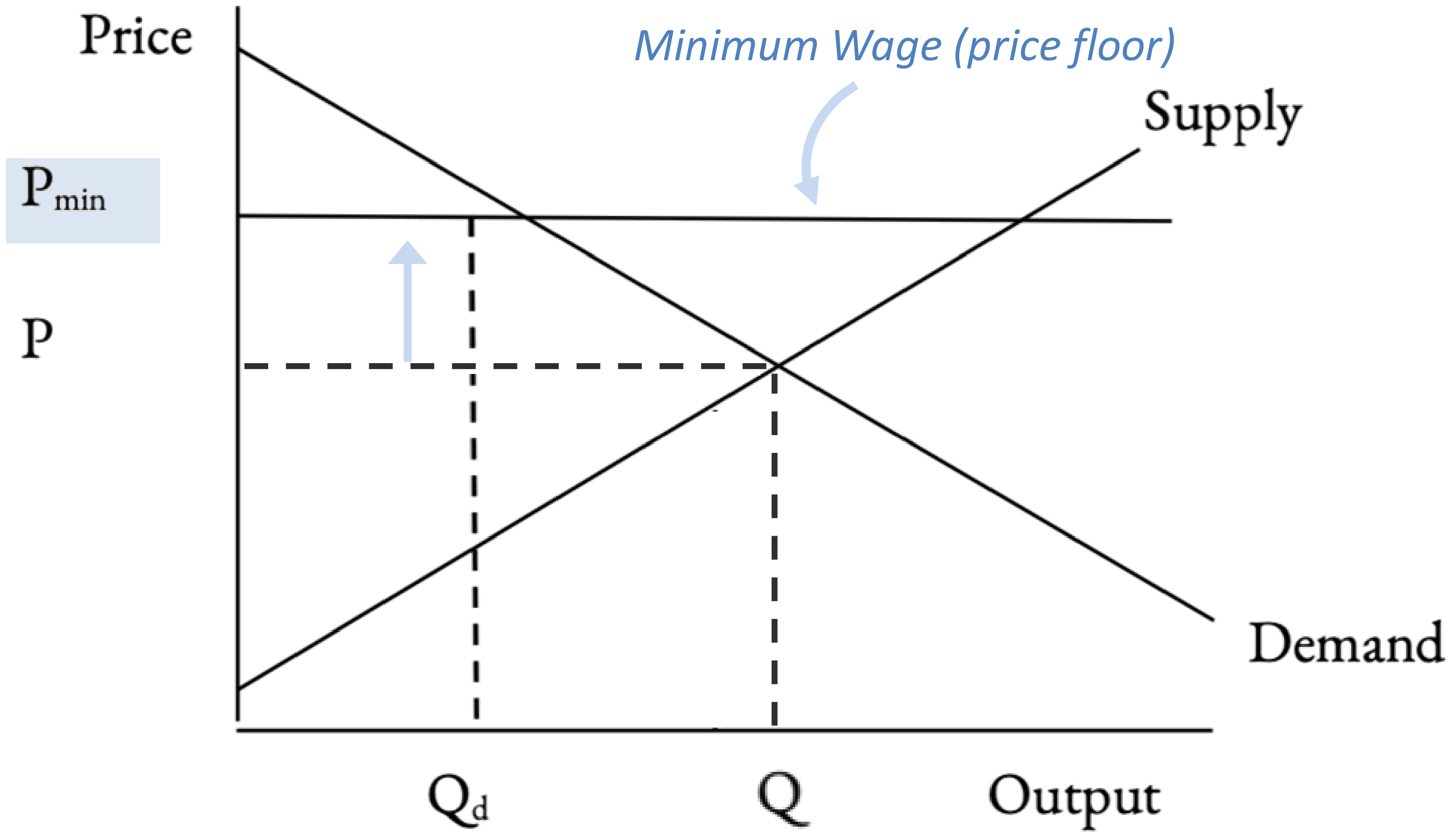
The government is concerned about producers (e.g., workers/factories) being harmed by low prices.

Solution

Government sets a minimum price (Pmin) at which a good can be sold in the market

Example

National and local minimum wage laws

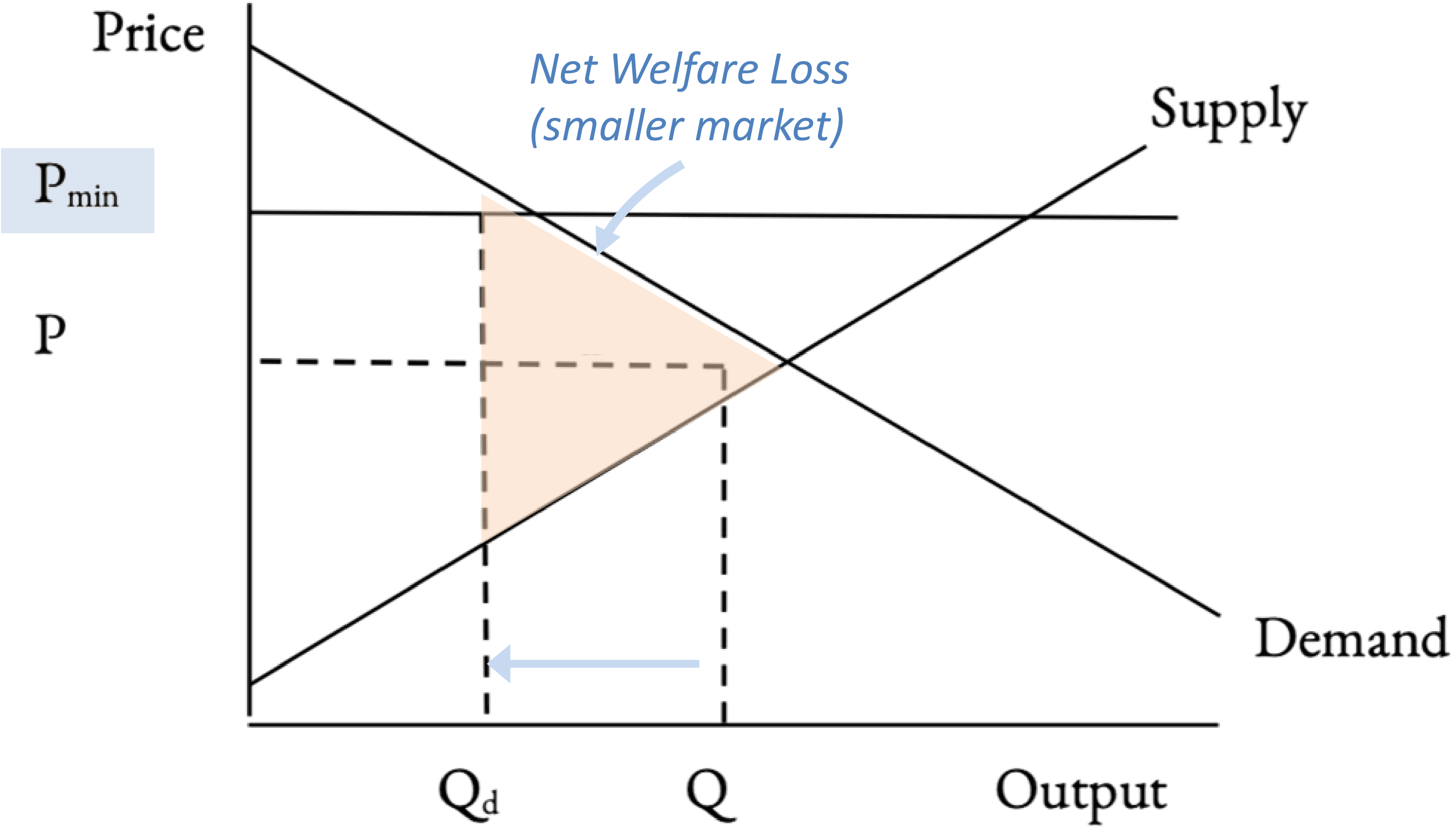


However, price floors can significantly disrupt market prices and harm consumers

Price Floors

Social Welfare Effects

- ***Consumers*** are worse off. They are paying more for a product than the value they assign to it (Pmin).
- ***Suppliers*** have ambiguous welfare outcome: gain from the higher price (P to Pmin) but lose from the lower number of sales (Q to Qd).
- ***Government*** gains no revenue and faces no cost.
- Overall, price ceilings lead to a smaller market and a loss of social welfare.



Governments sometimes set price ceilings to protect vulnerable consumers

Price Ceilings

Problem

The government is concerned about consumers being harmed by high prices.

Solution

Government sets a maximum price that can be charged for a good in the market

Example

Housing Rent-Control Policies

Social Welfare Effects

- ***Consumers*** have ambiguous welfare outcome: gain from the lower price, but lose from the lower number of products available.
- ***Suppliers*** are worse off – they are producing less and selling at a lower price.
- ***Government*** gains no revenue and faces no cost.
- ***Similar to price floor interventions, price ceilings lead to a smaller market and an overall loss of social welfare.***

Alternative Policy

Offer vouchers to the targeted group. This would make the good or service more affordable while not distorting the whole market and causing it to shrink.

If governments want to actively intervene in markets, they sometimes impose taxes

Consumption Tax

Problem

The government wants to generate revenue and possibly to dissuade over consumption

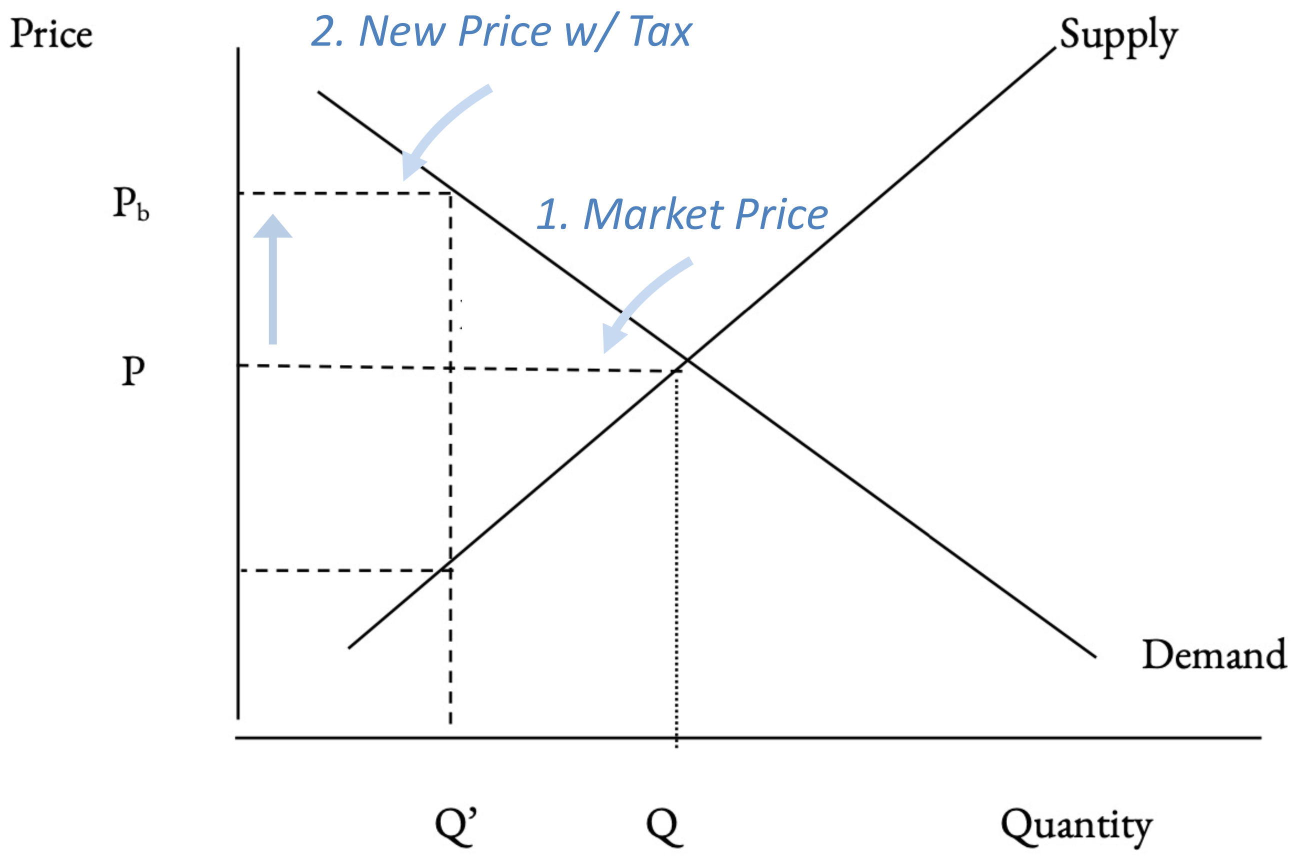
Solution

Government imposes a tax:

- Lump sum tax (charge per unit)
- Ad valorem tax (% of the value of)

Example

Tax on sugary drinks to reduce obesity

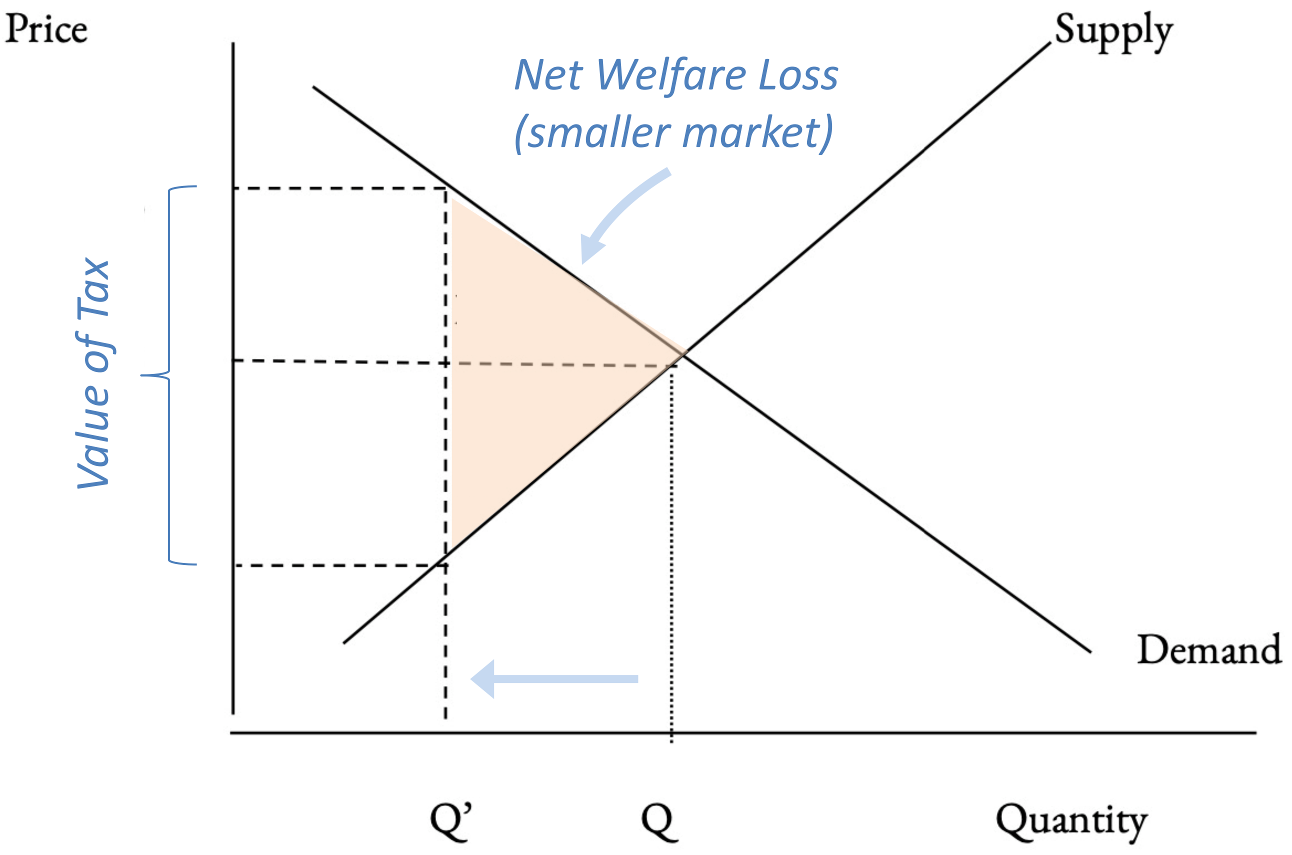


However, consumption taxes can harm both consumers and producers depending on the good

Consumption Tax

Social Welfare Effects

- ***Consumers*** are worse off due to a higher price paid. The loss is larger if consumers have few substitutes for the good.
- ***Producers*** are worse off due to a lower net price received. The loss is larger if it is difficult to change supply.
- ***Government*** gains tax revenue
- Overall, taxes distort the price signal to both buyers and sellers, and shrink the size of the market



In contrast, governments sometimes subsidize essential goods or promote new markets

Subsidies

Problem

The government wants to increase consumption and production of specific goods

Solution

Government creates a lump sum payment (usually to the supplier) per unit of a good consumed or produced.

Example

Government subsidies on necessities such as bread, cooking oil, childcare

Social Welfare Effects

- ***Consumers*** are better off due to a lower price paid.
- ***Producers*** are better off due to a higher net price received.
- ***Government*** incurs high costs by providing the subsidies.
- Overall, subsidies expand the market – *An increase in the quantity of the good sold in the market* – but the cost of the subsidy exceeds the benefits gained by consumers and producers.

Policy Insight

In many developing countries, excessive use of subsidies can cause huge pressure on government budgets and result in chronic budget deficits. Such issues can lead to macroeconomic instability.

Macroeconomic Principles

How does the economy function as a whole?

While *Microeconomics* focuses on the actions of individual agents within the economy, *Macroeconomics* inform how the economy functions as a whole.

What is macroeconomics?

Macroeconomics is the study of a national economy as a whole and its major aggregates – Consumption, Investment, National Savings, etc.

Macroeconomics can help answer some of these important questions:

- What determines how many goods and services a nation produces?
- What determines how many jobs are available in an economy?
- What determines a nation's standard of living?
- What causes the economy to speed up or slow down?

Successful macroeconomic policy tries to maintain ***price stability***, ***full employment***, *and* ***external economic balance*** *through the following tools:*

Inflation

Labor Market

Exchange Rates

Governments focus on limiting *Inflation* to ensure the stability of prices and wages

Definition

Inflation refers to an increase in the general price level, measured in percentage terms. We can measure this multiple ways:

CPI (Consumer Price Index)
A price index measured as a weighted average value of a "basket" of goods and services typically bought by a household in a given year.

PPI (Producer Price Index)
A price index measured as a weighted average value of a basket of inputs (such as wages, energy prices, raw materials, etc.) that reflects the cost of production facing manufacturers.

Growth Impact

Price stability helps create an environment conducive to investment, entrepreneurship, and innovation. Purchasing power for households is better maintained with low, stable inflation, enabling a better standard of living and the ability to smooth consumption.

For firms, price stability enables better planning and a focus on business improvements.

Measuring Inflation

Measurement of inflation data is an extremely important task that involves large teams of economists and researchers who constantly track the prices of goods and services across a country. Over time, measurements of inflation provide important feedback for policymakers.

Data Source: Inflation has dropped globally over the past decades, but varies greatly by country. *Look up your country's annual inflation for consumer prices here.*

At the same time, governments want an active *labor market* to drive economic growth

Definition

The labor market refers to the people in an economy who are working (full-time or part-time, formally or informally) or actively looking for paid work.

Governments pay close attention to these metrics:

- Size of the labor force
- Unemployment rate
- Labor force participation rate
- Employment-to-population ratio.

Growth Impact

Greater labor force participation across the board ultimately means that a country's economy can potentially produce more goods and services.

It is also important to understand what proportion of people are employed and whether there is excess labor since this will affect wages and other prices.

We will look at how labor fits into theories of growth in module 3.

The Informal Sector:

Labor in Developing Economies

In many developing countries, a significant share of the labor force is in the informal sector. Individuals working in the informal economy may be more vulnerable to shocks and have fewer opportunities to increase earnings.

Deep Dive: Read, ***"The Long Shadow of Informality"***, to learn more about challenges posed by the informal economy and economic growth. *Full link* here.

Externally, governments try to stabilize the value of their currency to buy and sell goods abroad

Definition

The nominal exchange rate (ER) is the price of one currency in terms of another. Governments traditionally pursue one of two policies relating to exchange rates:

Fixed exchange rate
Government commits to buying and selling currencies at the fixed rate to keep the rate stable.

Floating exchange rate
Government lets the market determine the exchange rate at any given moment.

Growth Impact

A stable exchange rate allows a country's economy to be able to buy and sell goods and services abroad. Producers can buy important inputs from foreign suppliers and anticipate the cost of operating. Consumers abroad can buy a country's exports and producers at home can be reimbursed adequately to cover costs.

We will look at how international trade can promote or inhibit growth in module 2.

Governments use both *monetary and fiscal policy* to maintain macroeconomic balance

Government Objectives

Short-Run Goals
Maintain price stability (low inflation), high employment, and rising economic output.

Long-Run Goals
Promote rising living standards, economic growth, and development that is inclusive and equitable.

Governments use two main tools to achieve macroeconomic stability:

Fiscal Policy

- *Government Spending*
- *Tax Policy*

Monetary Policy

- *Interest Rates*
- *Reserve Requirements*
- *Money Supply*

Countries use *monetary policy* to stabilize the overall economic environment

Monetary Policy Tools

Interest Rates

To help reduce inflation, interest rates can be increased by decreasing the money supply through sales of government securities (e.g., a bond). If the goal is to boost spending and investment, the Central Bank can lower the interest rate by increasing the money supply and increasing the amount of cash in circulation.

Reserve Requirements

A Central Bank can raise or lower the required amount of cash reserves that banks must hold to decrease or increase the money supply.

Credit Conditions

A Central Bank can loosen or tighten the lending requirements for banks to either make it easier or more difficult for individuals and firms to borrow.

Effective monetary policy responds to two concepts related to a national currency

Inflation ⬆

- Low to moderate inflation can be a sign of a healthy economy;
- However, high inflation erodes the value of savings and may lead to higher borrowing costs for individuals, firms, and the government.
- ***Hyperinflation*** can occur if money supply growth far exceeds growth in the real economy.

Deflation ⬇

- Deflation is a fall in the general price level, causing the value of money in circulation to rise. People delay spending to wait for lower prices, which puts pressure on businesses.
- This leads to production cut-backs and lay-offs, which further curtails consumer spending.

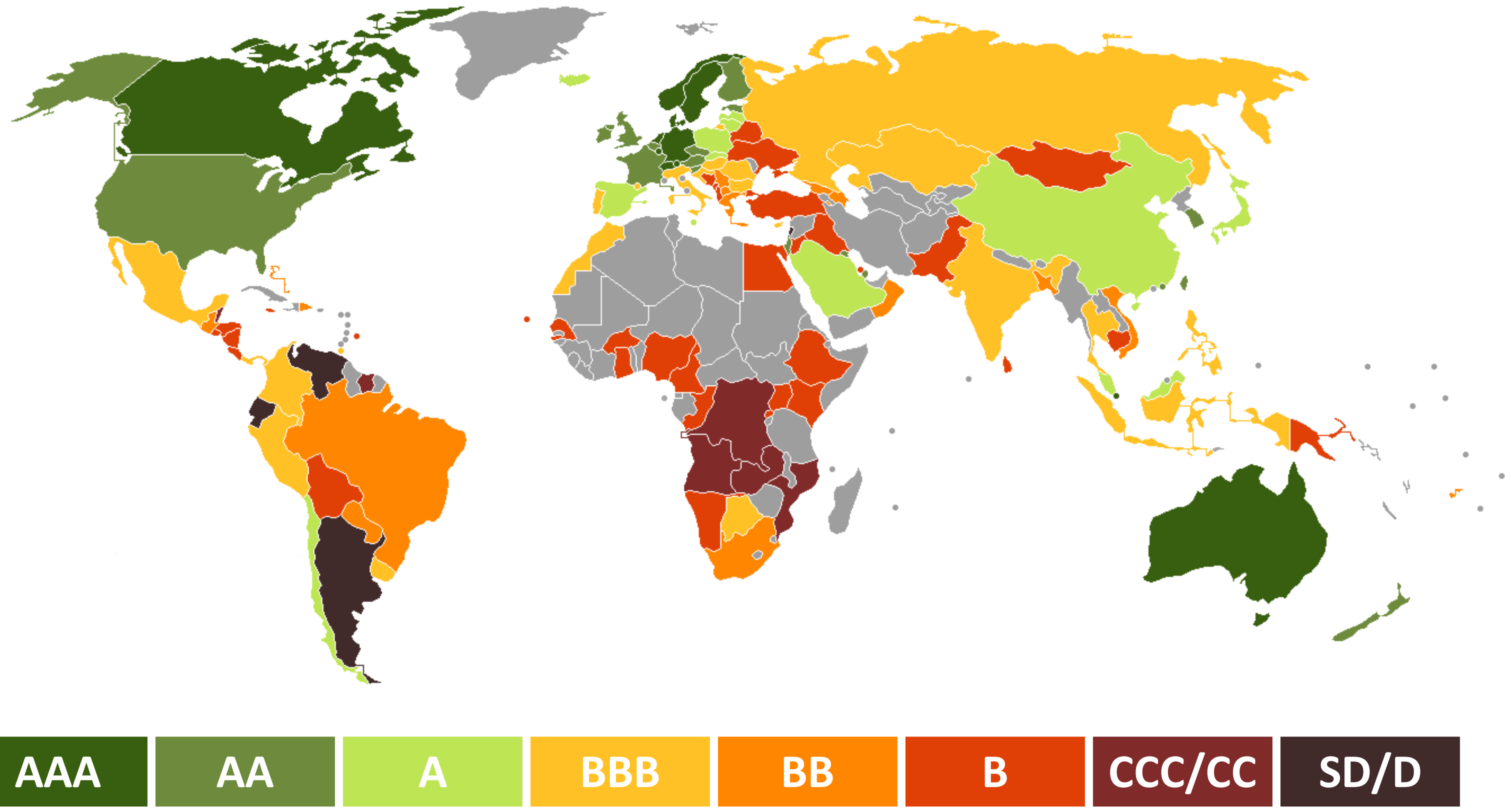
Monetary policy that establishes strong international credit is good for growth

National Credit

It is important for countries to have access to international credit markets. International credit allows countries to borrow from abroad for additional spending. Monetary policy that does not ensure stable currency values will make it hard to borrow or repay international loans.

Deep Dive: You can look at the credit ratings of different sovereign debt here. *Some countries' debt may not have ratings.*

Sovereign Debt Bond Rating (S&P) in 2019



Monetary policy that fails to check inflation can quickly destabilize the economy

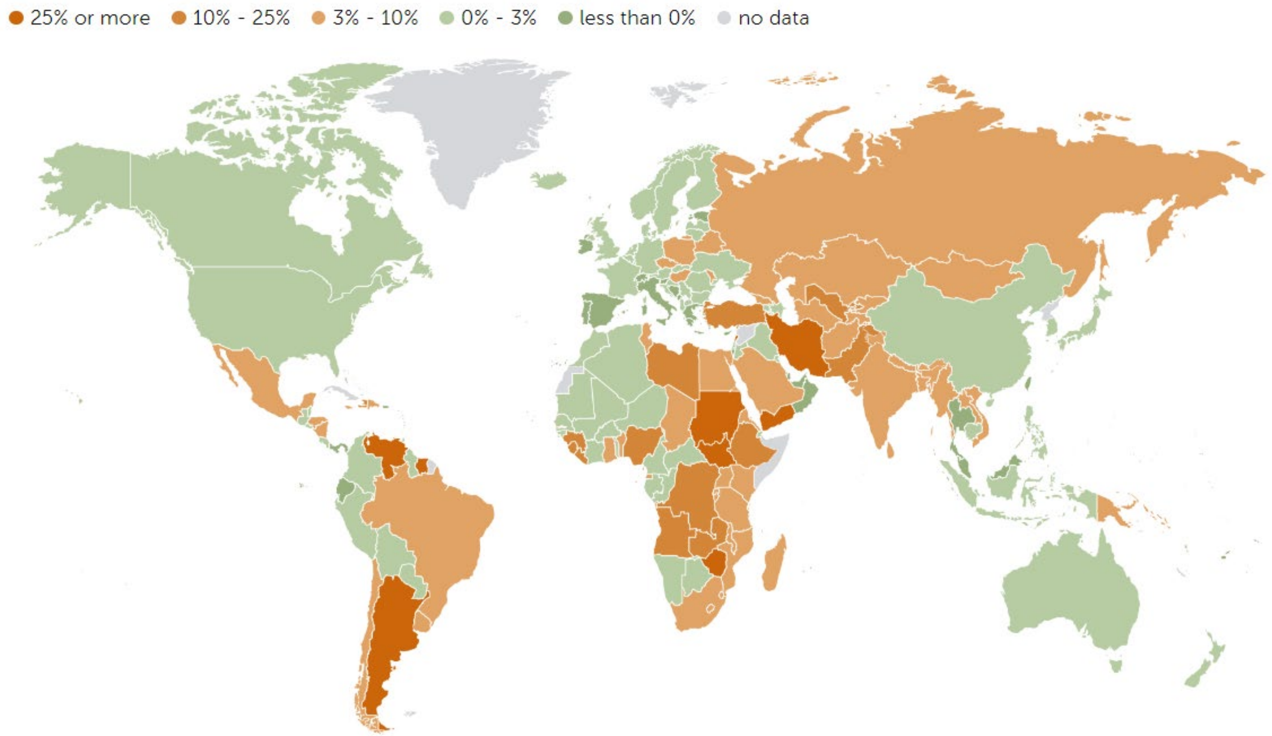
Hyperinflation:

Economic Collapse in Venezuela

While not unique to Venezuela, uncontrolled inflation can quickly destabilize an economy. Since 2017, Venezuela's economy collapsed with prices of goods quickly outpacing salaries. Businesses could no longer pay outside suppliers of essential goods.

Deep Dive: Read more from the Council on Foreign Relations about the economic crisis in Venezuela here.

At the height of the Venezuelan economic crisis in 2018, annual inflation was estimated at more than 65,000%



Fiscal policy uses government spending on programs to stimulate economic development

Fiscal Policy

Government Spending

To spur economic growth, a government may decide to spend some of its resources on important programming. For example:

- Infrastructure Investment & Public Works
- Healthcare & Hospitals
- Student Scholarships & Schools
- Agricultural Training
- Microfinance and rural savings programs

We will look at what types of government policies may be used to fuel economic development in module 3.

Revenue Generation

Governments can fund fiscal policy initiatives through the following mechanisms:

Taxes

Governments traditionally fund spending through taxes on consumption, trade, corporate profits, and wages.

Borrowing

Governments can obtain funds by issuing government bonds, which are purchased by investors in both domestic and international financial markets. (covered in module 2).

Development Banks:

Financing Development

Many developing countries receive loans from international development banks to fund government programs that will enable achievement of an important development goal. The most well-known development bank is the World Bank, which was established in 1944.

Deep Dive: Read more about the roles of development banks and how they support economic development here.

This module on micro and macro economics gave you an idea of some of the underlying factors that inform economic decisions made my individuals, firms, and governments.

The following modules will take a deeper look at the factors that spur economic growth.

International Trade Principles

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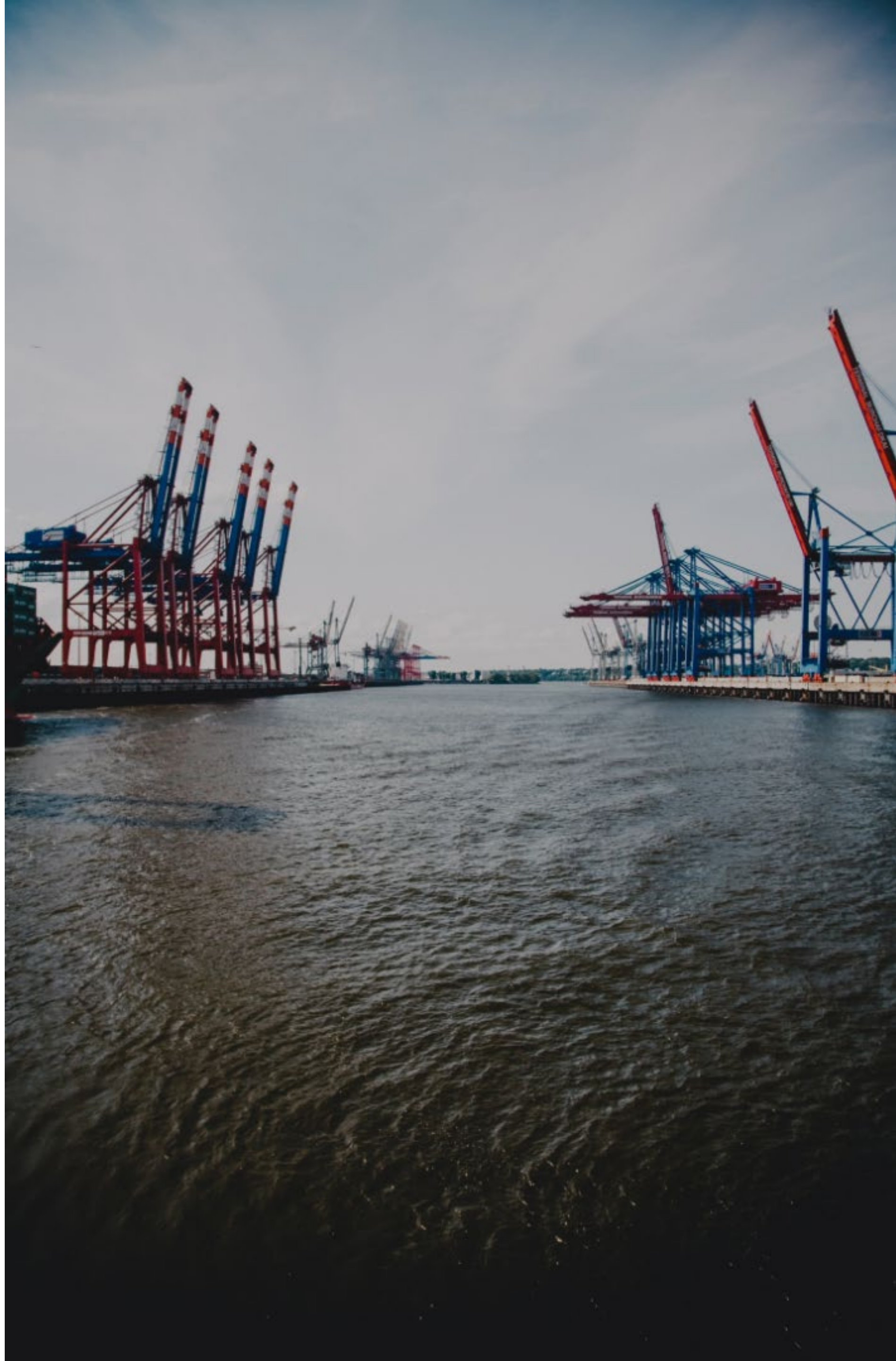

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International Trade & Economic Growth

How do trade and economies interact?

We are living in a global economy - driven by the incredible growth of international trade

Value of Global Trade (% of GDP)

How much is your country trading?

Trade has grown significantly over the past decades, and trade has grown more in some places than others.

Data Source: *Look up trade data in your country [here](#).*

Trade flows generate important sources of income and allows access to productive inputs

The free flows of goods and services between countries provide several key benefits to trade participants:

- Liquidity (cash on hand)
- Diversification
- Borrowing & Lending

Trading for Future Growth

Why is international borrowing & lending so important?

- Countries normally invest in their economies with ***national savings***
- International trade allows countries to ***borrow to invest in valuable capital*** that will drive growth

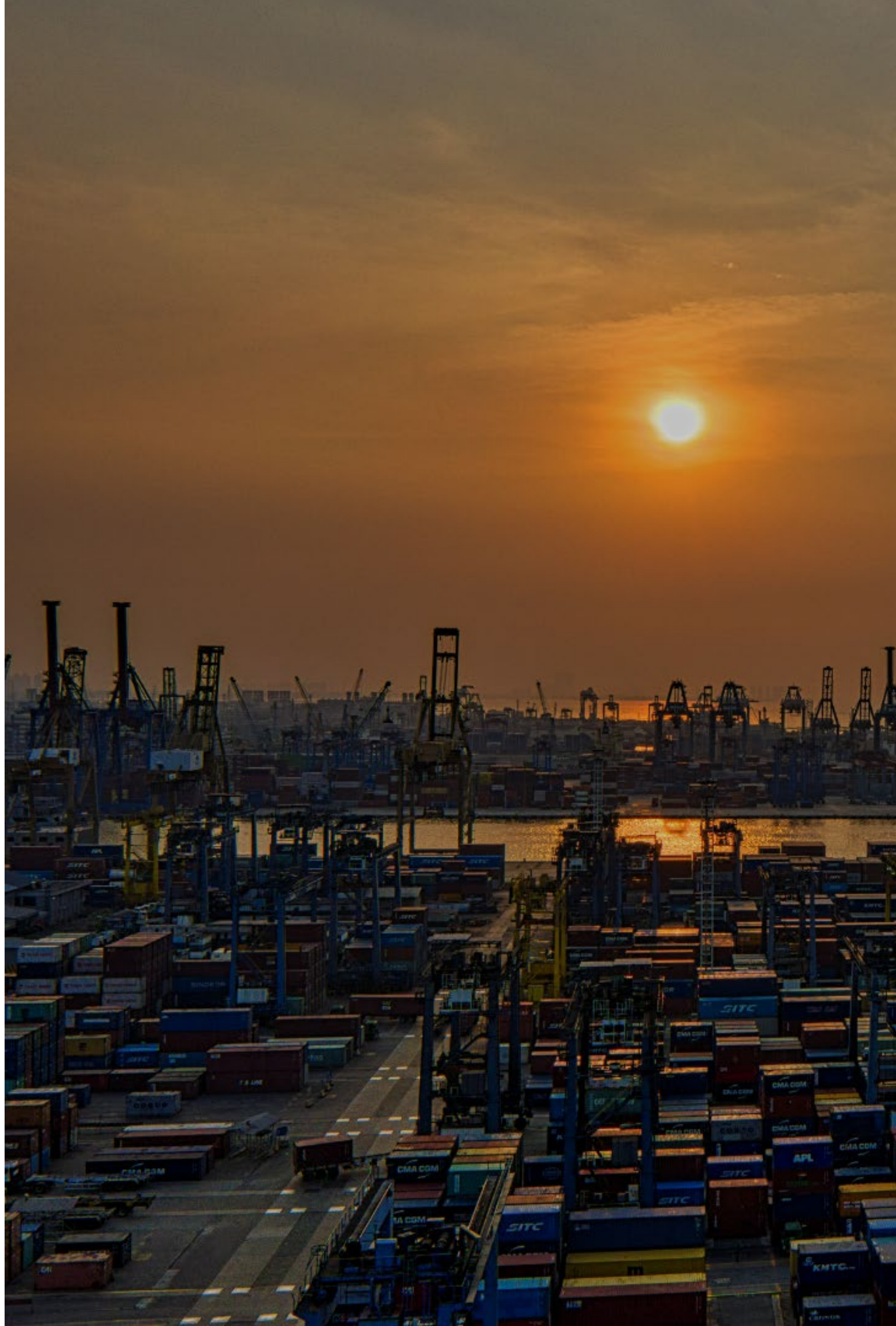
Our understanding of trade informs how policymakers drive growth

Trade & Growth

- How does trade increase opportunities for growth?
- How does trade decrease the cost of inputs?

Trade Policy

- Why do countries restrict trade?
- How can countries promote trade through policy?



International trade is facilitated through imports and exports of goods and services

Exports

- A product or service that is sold into the global market is called an export.
- Exports generate income inflows, offer employment, and can help diversify the economy.

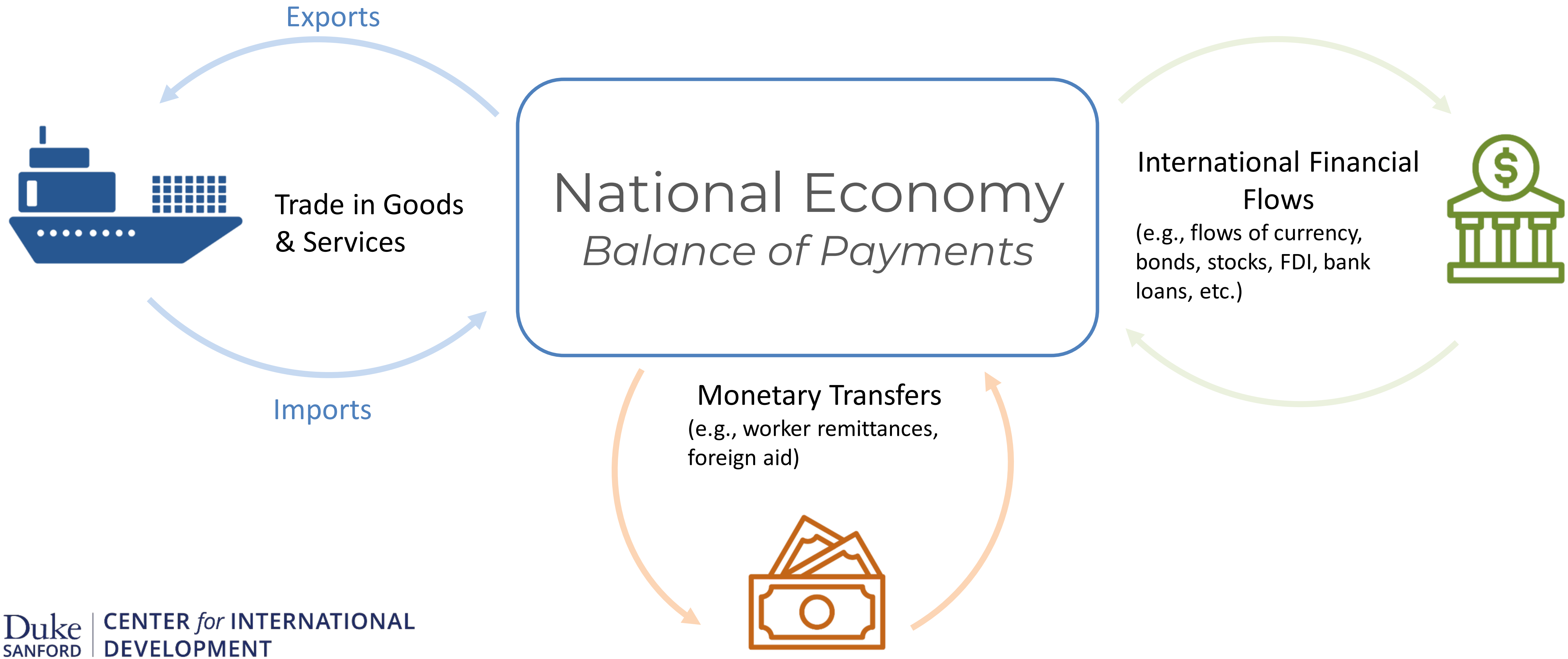
Imports

- A product or service that is bought from the global market is an import.
- Imports require payment outflows. They can be inputs to produce goods and services, or products or services that are in direct competition with domestic versions.

Trade Balance

- The value of exports minus the value of imports = trade balance
- Though imports can lead to some dislocation if their prices are lower and they compete directly with domestic goods, trade is mutually beneficial, not a zero-sum game.

The record of all trade between a country and the world is captured in a country's *Balance of Payments*



Balance of Payments consist of three primary components

Current Account (CA)

The current account includes ***all exports*** which are counted as credits (+) and ***all imports*** which are counted as debits (-). These include goods and services, as well as monetary gifts (transfers).

Capital Account (KA)

The capital account includes the accumulation (+) or disposal (-) of:

- Assets related to ***future production*** (e.g., brand names, trademarks, natural resources, etc.) and,
- ***Transfers of capital*** (e.g., debt forgiveness, inheritance transfers, etc.)

Financial Account (FA)

The financial account tracks the sales and purchases of ***financial assets and liabilities*** between foreign and domestic entities.

Domestic purchases of foreign financial assets generate payment outflows (-), while foreign purchases of domestic assets generate payment inflows (+).

A country's current account balance indicates whether a country is *borrowing* or *lending*

Borrowing

A country is borrowing when it is buying more imports than it is selling in exports. Borrowers must be able to generate enough hard currency reserves to repay their creditors. Crises can occur if foreign investors sell their holdings of domestic assets, which can cause a loss of liquidity in the domestic economy and push the value of the domestic currency down.

Lending

A country is lending when it is selling more exports than it is buying in imports. Lenders might see inflation as reserve inflows increase. They may also lack good domestic investment opportunities, so money flows abroad, seeking better returns.

Trade Deficits: Good or Bad?

Trade deficits are a natural result of the modern global economy, with trade balances fluctuating from year-to-year. However, long-term trade deficits can be unsustainable in some cases.

Video Resources: Watch a short video to learn more here *and watch a CFR webinar here*.

Why would a county engage in borrowing or lending?

- If a country does not have enough savings and is unable to invest adequately from public and private resources, ***the country's economy may shrink.***

- To avoid a situation in which the economy shrinks, ***a country needs to borrow from abroad to finance its investment***, so it buys more imports than exports and sells assets (bonds) to borrow.

How much do you owe?

A nation's balance of payment can vary widely over time due to national, regional, and global economic factors. A nation may have a negative BoP one year and positive the next.

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Data Source: *Look up BoP data on your country [here](#).*

Although trade is mutually beneficial, governments sometimes choose to restrict trade

Why do governments restrict trade?

Revenue

For some countries, the income and property tax base is relatively small due to underdevelopment and the existence of a large informal economy. A government may rely on domestic sales taxes and trade taxes to generate most of its revenues.

Political Influence

Firms may lobby for protection from competition abroad in exchange for political support. Certain firms may have political influence over policy decisions.

Import Substitution Policy

An industrial policy strategy to boost domestic manufacturing growth by protecting nascent domestic industries with tariffs on import-competing goods.

Countries have two main policy approaches to restricting international trade:

Import Tariffs

Import tariffs are a tax on a specific imported good or service.

Import quantities from the tariff-affected country shrink, domestic sales rise, and consumers pay the full cost of the tariff.

Non-tariff Barriers

Non-tariff barriers include a variety of tools designed to restrict trade:

- Quantitative restrictions
- Technical barriers to trade
- Export subsidies
- Preferential treatment for domestic firms in government contracts
- Anti-dumping and countervailing duties

How trade accessible is your country?

Each country may use a combination of tariff and non-tariff barriers to restrict international trade.

Data Source: *The World Bank and United Nations have created a comprehensive database on global trade. Look up trade accessibility on your country here.*

Each type of trade barrier affects different stakeholders differently

Trade Barrier Type	Buyers	Domestic Producers	Government	Net Impact
Import Tariff	--	+	+	-
Import Quota	--	+	0	-
Antidumping duty	-	+	+/0	-
Countervailing duty	-	+	0	-
Export ban	+	-	0	-

Who wins and who loses?

Depending on the design of a trade barrier, different stake holders will benefit from the policy and others will suffer.

- In general, ***trade barriers will have an overall negative impact on a country's economy.***
- Most types of trade barriers will provide advantages to domestic firms by shielding them from international competition.
- Recent export bans in the wake of COVID-19 have attempted to alleviate domestic shortages for buyers, but have created other distortions.

Learn more about trade barriers and trade policy from Duke University faculty

Deep Dive: Trade Barriers

Prof. Corinne (Cory) Krupp

Cory Krupp is an economist and a Professor of the Practice of Public Policy in the Sanford School. She has taught courses on International Trade and Policy, Economic Foundations of Development, Microeconomic Policy Tools, European Union Trade and Finance Issues, and Macroeconomic Policy and International Finance. Prof. Krupp also serves as the Associate Dean of Academic Programs at the Sanford School, with responsibility for curriculum development for the school's main programs.

International Trade & Poverty

How does trade impact poverty?

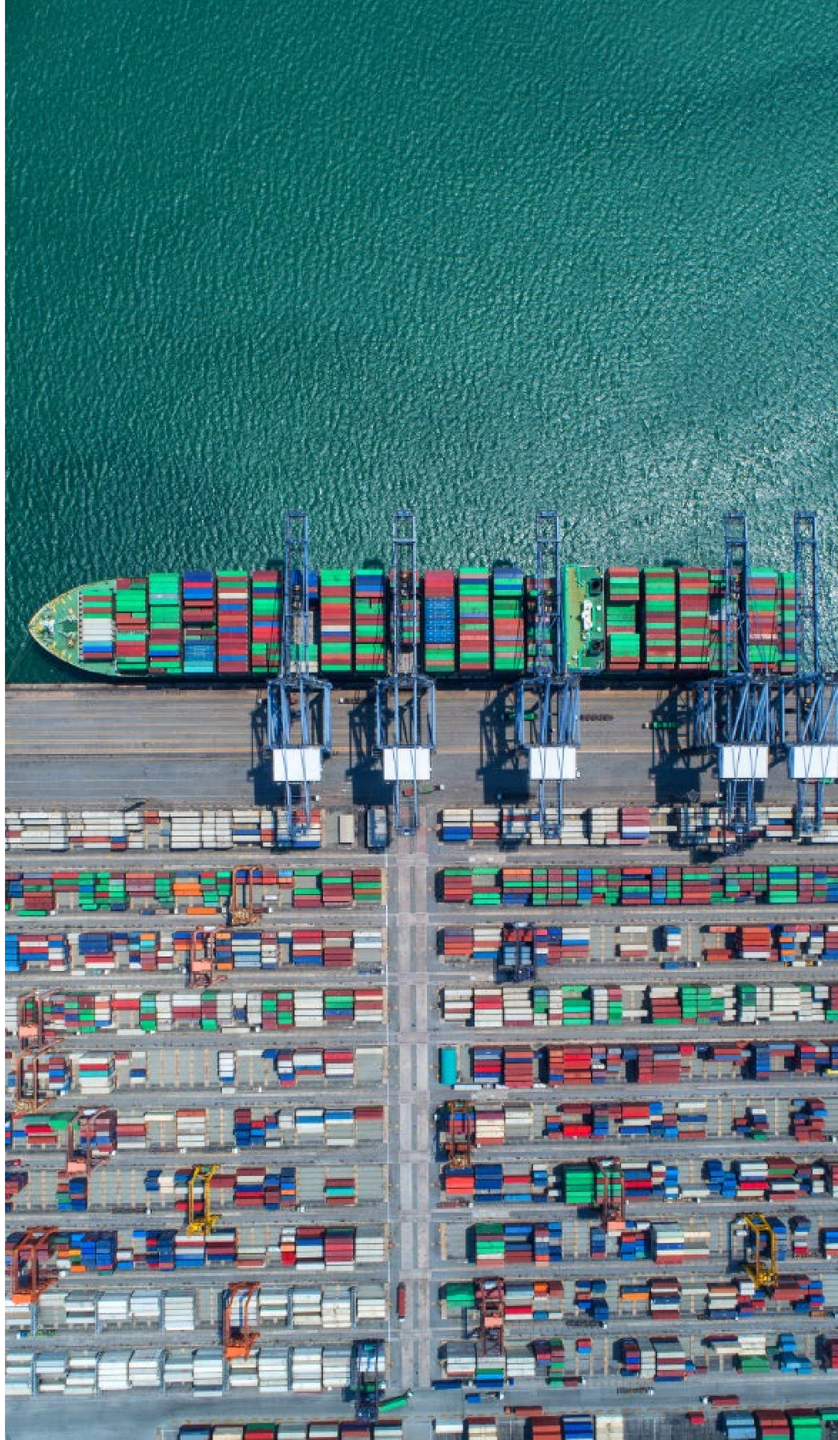
International trade can potentially alleviate poverty through several different pathways

Spurring economic growth by increasing efficiency, enabling firms to lower costs and prices, diversify their sales into new markets, buy cheaper inputs, diffuse new technology, etc.

Urbanization accompanied by foreign direct investment (FDI) and infrastructure investment, can lead to "pulling" the poor out of unproductive rural activities into more productive urban employment, with better education and health services.

Knowledge transfers from interacting in international networks can lead to improvements in health and education.

Trade can benefit the poor through ***more competition and lower prices***, access to higher quality new goods and services, new job opportunities, higher wages and income.



While often beneficial, disruptions to markets from trade can pose challenges

The impact of globalization on the poor depends on how it interacts with the rest of the economy. To disseminate the benefits of trade, policies need to support credit and technical assistance to farmers, good governance, rule of law, decent institutions, macro stability, flexible factor markets, etc.

More competition can lead to market dislocation for domestic firms, which can lead to **greater unemployment in trade-exposed industries.**

Trade **exposes many countries to risk of financial crises**, and when these crises have occurred, the poor are hurt disproportionally.

Globalization can **produce both winners and losers among the poor**. Poverty rates rise among those whose livelihood depended on trade protection and falls for those who benefit from export expansion.

The International Trade Regime

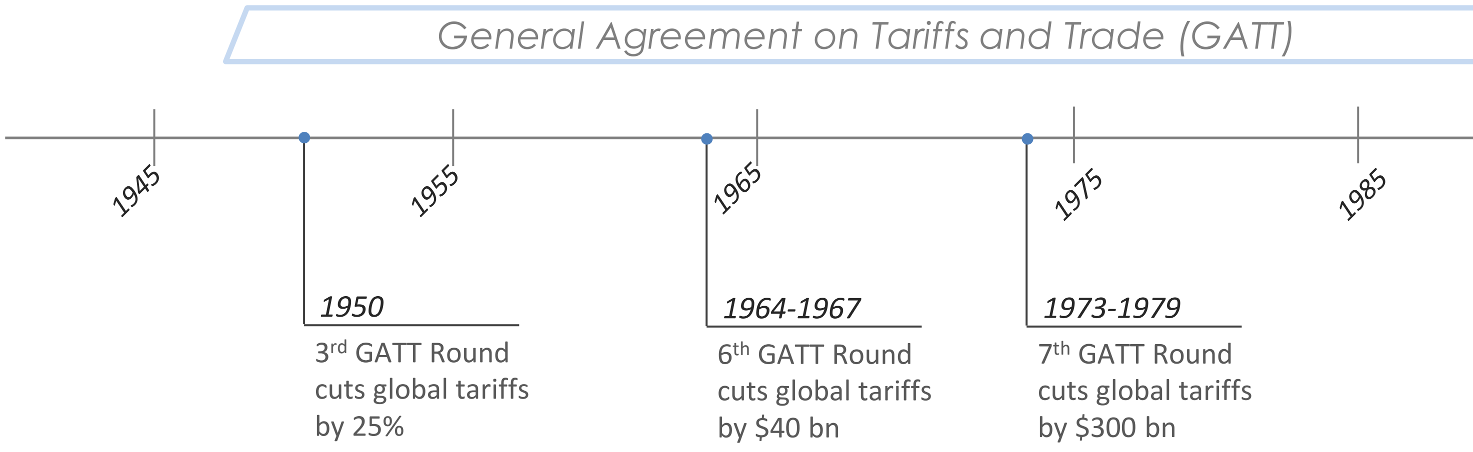
How do countries advance open and equitable trade?

Trade can sometimes result in disputes which require mediation and clear frameworks

International trade governance has evolved in the post-war period, starting with the General Agreement on Tariffs and Trade in 1948

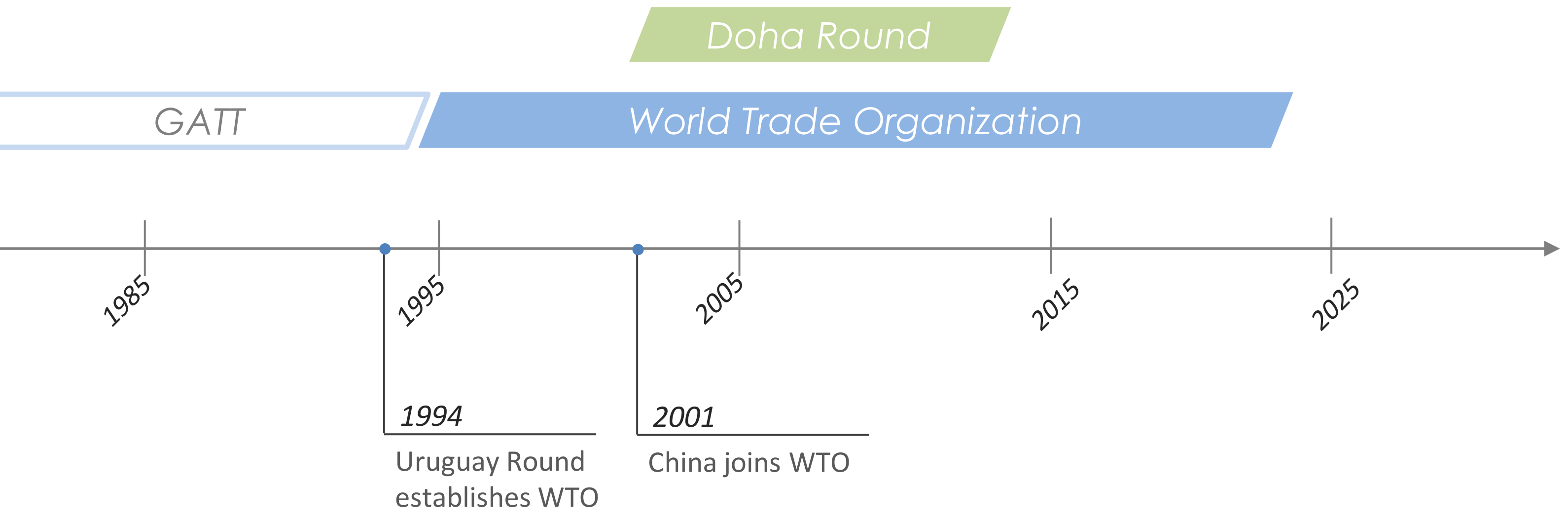
General Agreement on Tariffs and Trade (GATT)

A mechanism for periodic reviews of each country's trade policies. It created ground rules for multilateral negotiation for further tariff reductions, which occurred in eight rounds of talks between 1948 and 1994.



International trade can sometimes result in disputes which require mediation and clear frameworks

Launched in 2001, the [Doha Round] was the WTO's latest attempt to secure broad international reductions in tariffs across 20 areas of trade. The round attempted to focus on the nexus of trade and development. These talks encountered issues and broke down in 2011.



World Trade Organization

The Uruguay Round in 1994 led to the adoption of an agreement that included the creation of the World Trade Organization. As a formal organization, the WTO had the power to adjudicate trade disputes, monitor member countries' trade policies, convene multilateral trade negotiations, and cooperate with the other international financial institutions on global policy issues.

Visit the WTO website here.

The WTO established clear norms for international trade – setting a framework for coordination

Transparency & Equal Treatment

- Trade agreements take the following principles into account:
  - ***Non-discrimination*** – Countries cannot treat trade partners unequally
  - ***Reciprocity*** – Trade agreements will seek mutual changes in trade policy
  - ***National Treatment*** - Imported and locally-produced goods should be treated equally
- Under the WTO, ***protectionist emphasize the use of tariffs,*** while quantitative restrictions are largely prohibited.
- All countries ***publish updated tariff schedules and face regular trade policy reviews.***

WTO Country Status

Countries can either be WTO members or observers depending on organization requirements for full membership, economic development level, and/or their status within the international community. Full WTO membership affords greater privileges to a country.

Data Source: *Look up your country's WTO membership status here.*

The WTO also established mechanisms for mediation and rule enforcement

The WTO has several mechanisms and tools to ensure respect for international trade rules:

- ***Rules for ensuring fair competition*** – allowing for the use of anti-dumping and countervailing duties.
- ***Temporary protection from unfair trade practices*** – Escape clause and safeguards rules.
- ***A dispute settlement mechanism and appeals process.***
    - Countries can lodge complaints against trade partners if they believe a partner's practices violate WTO rules.

Case Study – Dispute Resolution

Read about a WTO dispute resolution case study between Venezuela and the United States.

Read the case study *here*.

Understanding Disputes

Countries can bring trade disputes to the WTO's Dispute Settlement Body, which includes a panel of other member countries. Prior to dispute resolution, the involved parties can go through a mediation process to agree on steps to resolve the dispute.

Data Source: *Look up current and past WTO trade disputes here.*

Despite potential benefits, trade is only one tool for increasing development – not a silver bullet

Relying on trade or foreign direct investment alone is *not* enough to alleviate global poverty. The global poor often need access to holistic development interventions that improve access to:

- Education
- Finance
- Health Care
- Infrastructure

And much more…

Development Economics Theory

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Production & Models for Growth

How do we understand economic growth?

What is Development Economics?

Development economics is the study of economic transformations and their effects on well-being (human condition).

Development economics considers factors such as health, education, working conditions, domestic and international policies, and market conditions, with a focus on improving living standards in the world's poorest countries.

How do we measure development?

There are numerous measures we can use to assess development:

- GDP per capita
- Consumption per capita
- Population Growth
- Infrastructure
- Urbanization
- Social Conditions

How much do your citizens make?

A standard measurement of development is a country's GDP per capita – the country's total economic output divided by its population. Measured in US dollars, this provides a standard measure across countries.

Data Source: *Look up GDP per capita for your country here.*

Development is a country increasing its productive capacity to meet citizens' basic needs

- A country's ability to meet its citizens' basic needs is a function of how many goods and services its economy can produce – its ***Production Possibility Frontier (PPF)***.

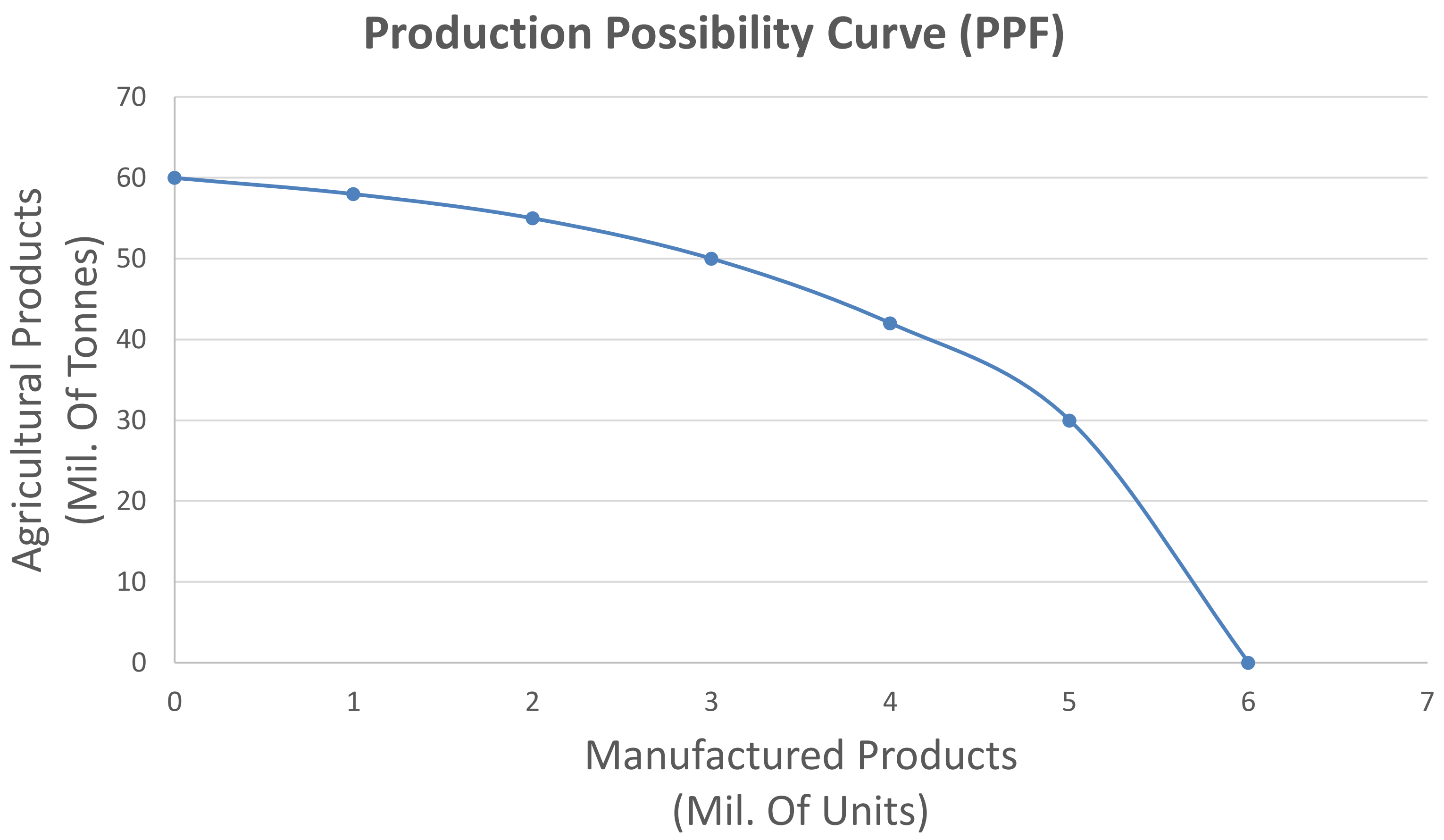
- The ***Production Possibility Frontier*** shows the combination of goods that a country is *capable of producing* given its limited available resources.

In a basic model, we think of a country's production as result of ***two main factors of production***:

Labor

Capital

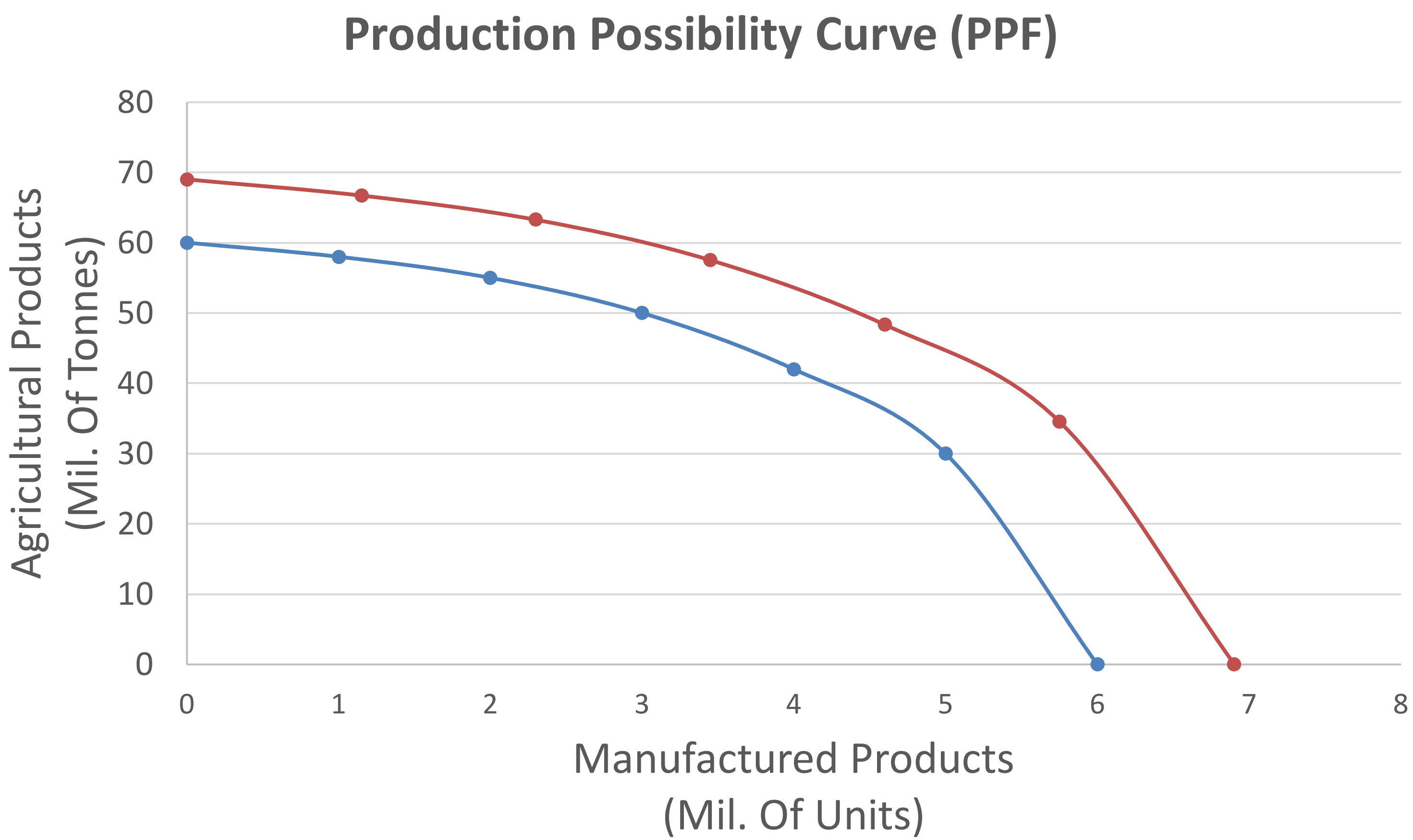
A graphical representation of the PPF helps us understand how we can increase growth



The ***blue curve*** shows Country A's PPF of manufactured products and agricultural products.

We assume agriculture is a labor-intensive sector and manufacturing is a capital-intensive sector.

In general, increasing a country's input factors will lead to greater potential growth

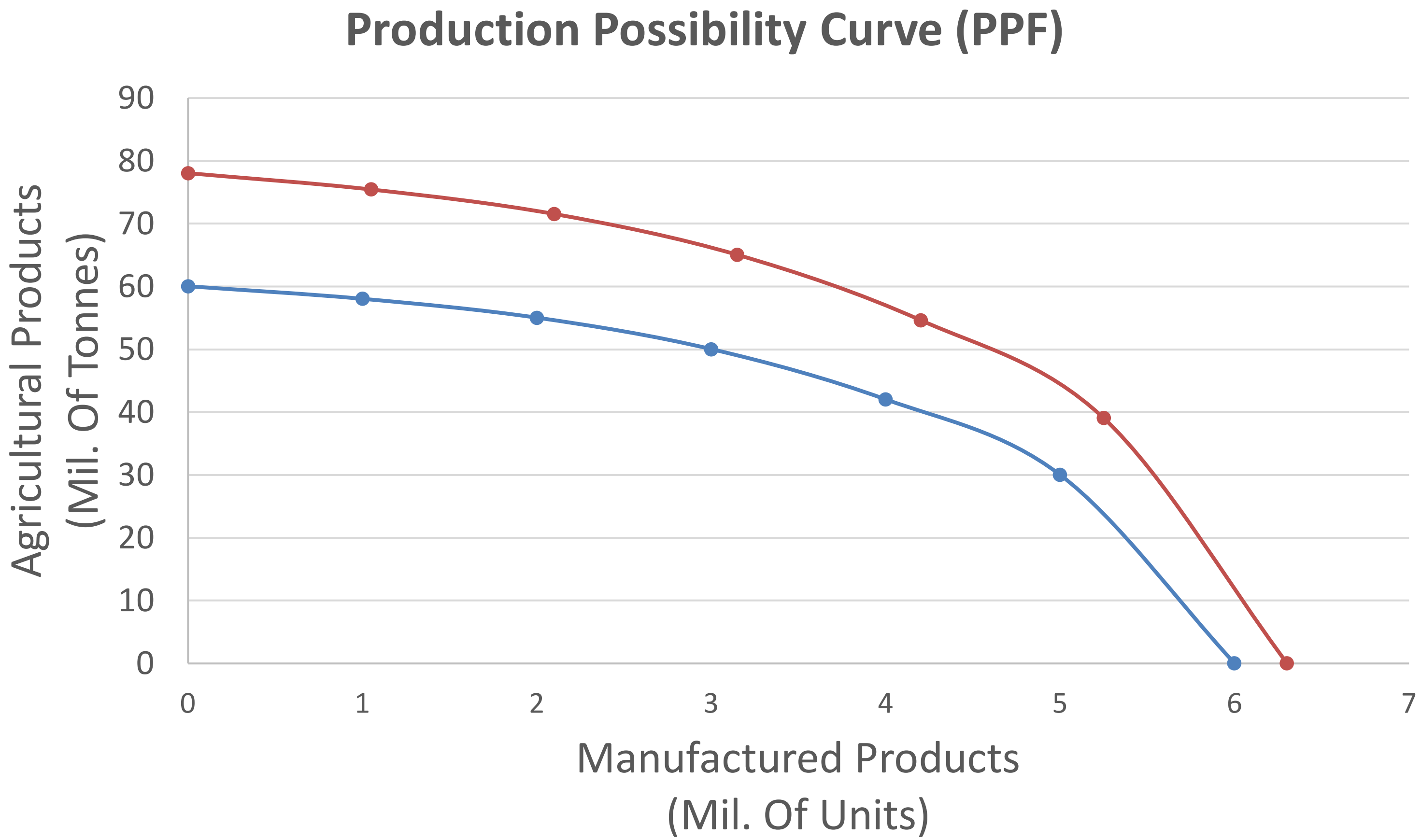


The graph to the left shows a country that has increased the amount of both potential factors: **labor** *and* **capital**.

Note: *More raw materials could also increase potential growth. This could arise from free trade agreements – <u>See Module 2 on International Trade</u>.*

Increasing labor will increase potential growth, but favor agricultural products

Labor

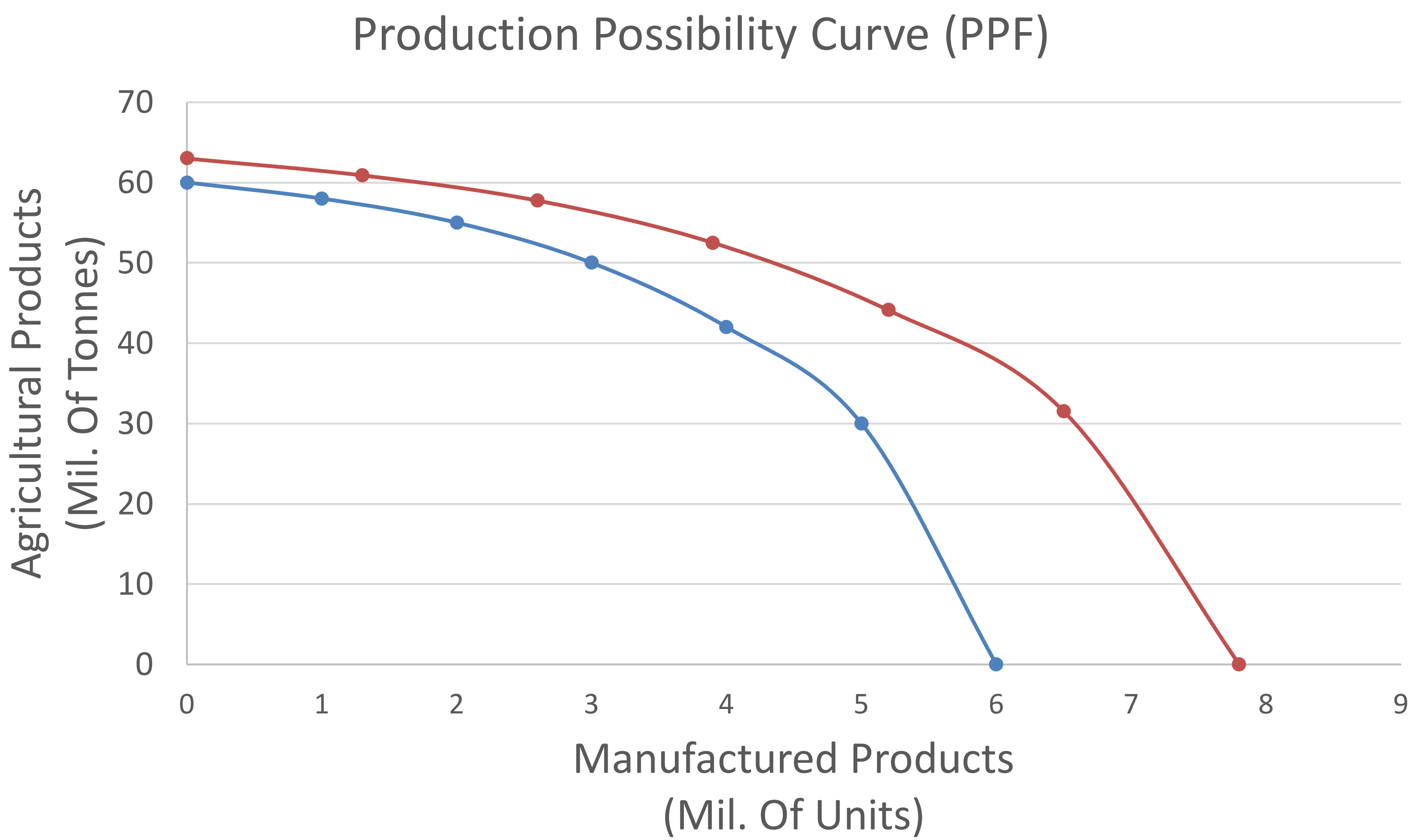


Increased labor could arise from increased birth rates, decreased mortality, and/or increased immigration.

Increasing labor will increase the production of labor-intensive goods and services. In our example, this is agriculture.

Increasing capital will increase potential growth, but favor manufacturing

Capital



Increased investments in buildings and equipment could arise from savings, borrowing, and/or foreign direct investment.

Increasing capital will increase the production capital-intensive goods and services. In our example, this is manufactured products.

Growth is more complex than a simple accumulation of factors of production

Labor *Capital*

*Economists use the **Solow Model** to simulate a more robust economic growth that considers the following two factors:*

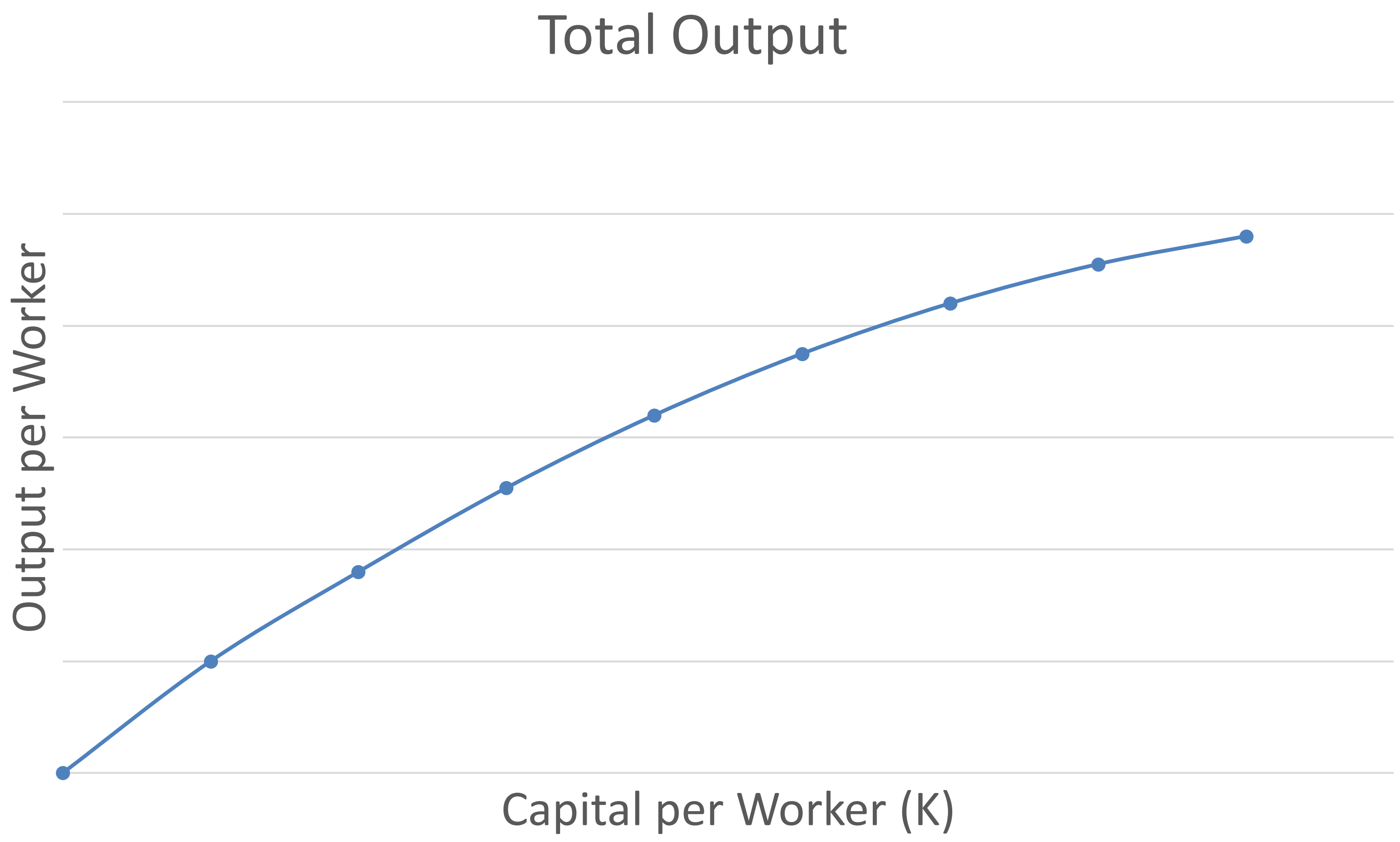
Interaction of Factors of Production

Labor and capital do not produce linear returns to scale – ***diminishing returns***. How these factors are employed jointly affects their overall productivity.

Long-term Growth

Growth is a process that happens over time. ***Growth rates*** are affected by the initial endowment of capital or labor for a particular country and how quickly these factors are added.

The Solow Model acknowledges diminishing marginal returns for additional capital or labor

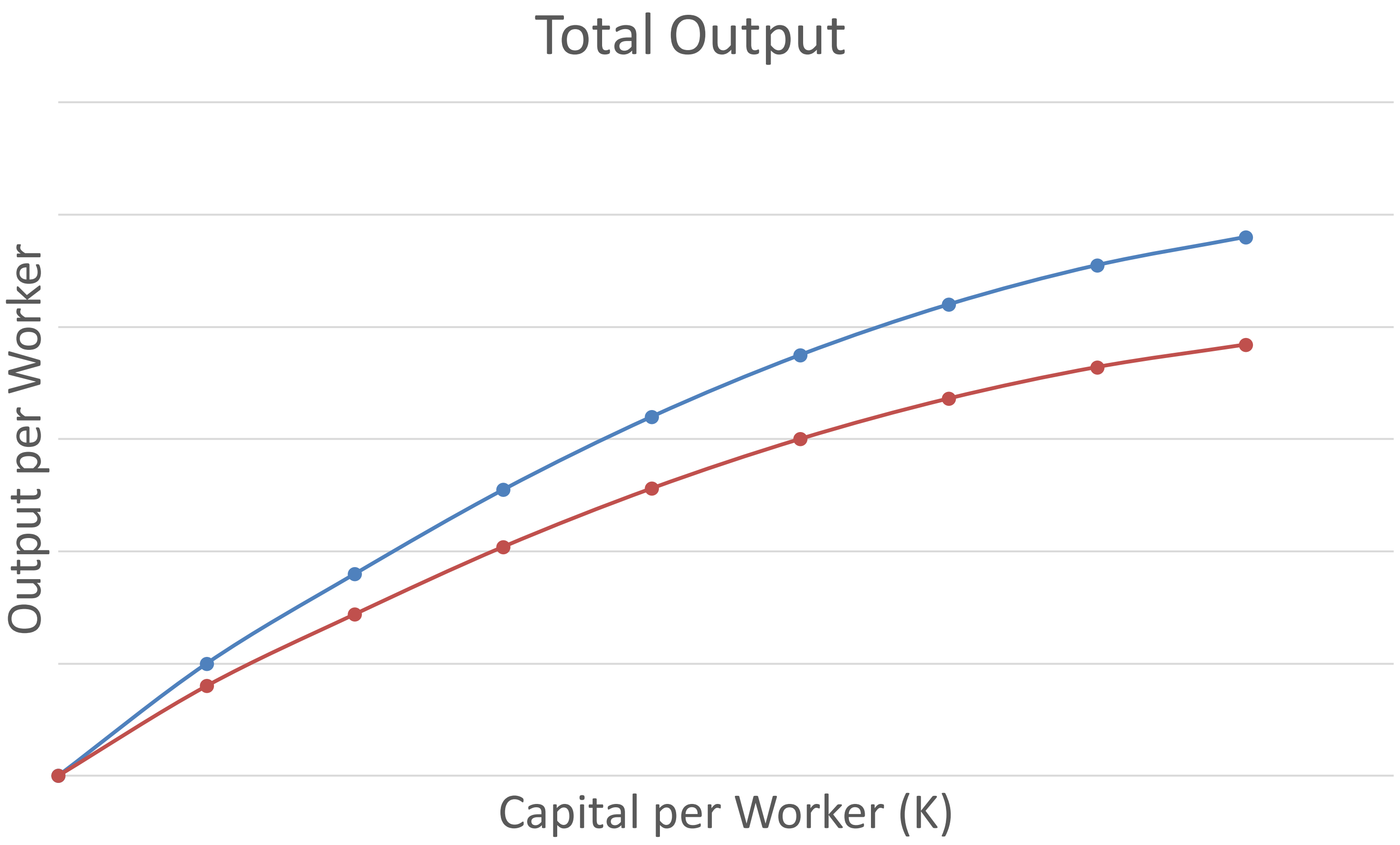


Diminishing Marginal Returns

Adding more capital to fixed labor and technology can increase output, but in smaller increments, indicating that there are diminishing returns to a single factor.

Note: The graph to the left shows decreasing incremental output for each additional unit of capital.

The Solow Model also helps us focus on output per worker as key to growth



Output per Worker

Conversely, adding more labor, while holding technology and K constant: Due to diminishing returns, adding labor to fixed K and productivity would imply a **reduction** in output per worker.

Note: The orange line to the left shows decreasing output per worker when additional labor is added.

In the long-term, the Solow Model states that growth will reach a steady state

What is Steady State Growth?

- Growth takes place as the capital stock per worker expands, enabling each worker to become more productive by having more capital to work with.
- Since growth from additional capital occurs at a slowing rate, additional capital will eventually reach a point where the cost of depreciation equals the rate of investment – growth will stop.

How do countries sustain growth in the long-term?

Long-term growth is dependent on improvements in technology.

- Our previous conceptions of output per worker made technology constant and did not account for improvements in technical capability – or ***multifactor productivity***.
  - Multifactor productivity can ***increase output while holding labor and capital constant.***
  - Productivity increases from technology and efficiency are ***not subject to diminishing returns.***

We will examine examples of multifactor productivity more closely in the next section.

Research & Development

While not the only measure of technology, a country's % of GDP spent on Research & Development (R&D) is an important measure of long-term growth potential.

Data Source: *Look up R&D in your country here.*

Determinants of Development

Understanding the main drivers for economic growth

An expanded understanding of development and growth focuses on four main drivers:

Population plays an important role in providing labor for an economy

Definition

Population growth is the increase in the number of individuals in a country over time. Population growth may arise from the following:

- Increased fertility rate
- Decreased mortality rate
- Increased immigration

Growth Impact

A larger population provides a greater pool of potential labor. Labor is an essential component in producing output, but more people also means more consumption.

An increase in the population growth rate can lead to a decrease in output per worker, unless capital accumulation increases.

Policies for Growth

Depending on a country's labor needs, nations may want to increase or decrease population growth.

Reducing Population Growth

- Contraception promotion
- Women's empowerment campaigns

Increasing Population Growth

- Tax breaks and incentives for families with children
- Pro-immigration policies

Physical capital is one of the main factors used in production, especially manufacturing

Definition

Physical capital are the tools and equipment used by labor. Capital accumulation generally involves investment in the following:

- **Physical fixed capital**
  - Non-residential buildings (factories and retail),
  - Residential buildings (e.g., apartment buildings, single family homes),
  - Productive equipment and machinery
- **Intangible capital**
  - Research and development spending
  - Intellectual property (trademarks/patents)

Growth Impact

A higher savings rate can enable more investment and a higher capital stock. This will lead a temporary boost to growth.

Since increased capital is subject to diminishing returns, it does not permanently raise the growth rate. The economy will be able to achieve a higher level of steady-state output – more income per capita.

Numerous policies aim to increase physical capital at the national and household level

Macro Policies

Policies that try to boost a country's overall capital stock at a macro level include:

Foreign Direct Investment (FDI) promotion aims to develop new industry with outside funds.

Infrastructure investment connects businesses to markets and lowers the cost of operating for firms.

Micro Policies

Many countries have policies that aim to improve a country's capital stock at a household level.

Micro-finance Programs aim to increase credit and liquidity for households, allowing them to invest in productive assets.

Household Savings Programs help households save earnings for future investments in physical and human capital.

Human Capital helps us understand the quality and overall productivity of labor

Definition

Human capital refers to characteristics of labor that increase productivity, including education and skills training, health improvements, and better nutrition. We typically divide human capital into the following categories:

- **Health**
  - Nutrition – malnutrition & obesity
  - Health – healthcare access; infectious & non-communicable disease prevention
  - Environmental health factors – pollution & sanitation
- **Education**
  - Schooling – primary, secondary, and tertiary education
  - Girls' education – access to school; % of girls enrolled in school

Growth Impact

Increasing human capital raises the growth rate of per capita output.

Human capital can be increased and accumulated through investment in people: more and better education, job training, and improvement in health conditions.

Policymakers have many tools to improve health and education outcomes

Health Policies

Many policies try to reduce the burden of disease and help individuals reach full biological potential.

Immunization programs focus on stopping often fatal, but preventable diseases among children and adults.

Nutrition programs provide additional calories and nutrients to ensure children develop both physically and cognitively.

Education Policies

Education policies often aim to expand access and quality of education.

Education Access Programs aim to ensure that students enroll and stay in school until they complete secondary school.

Vocational Training Programs try to provide young people and unemployed workers with skills to work in specific sectors or generate new businesses.

A Smarter and Stronger Labor Force

Human capital is heavily influenced by the opportunities available to individuals based on their specific circumstances throughout their lifetime – *how healthy they are as children, what schools they can attend, what training they receive*.

i

Data Source: The World Bank has established a Human Capital Index to help policy makers understand their own country's human capital. *Look up your country here*.

Productivity is the key component to unlocking long-term growth

Definition

Productivity refers to the amount of output produced with a given amount of inputs. There are many ways in which productivity can increase:

- ***Technological advances*** that allow economies to produce more output with the same amount of resources;
- ***Exposure to and adoption of better management practices***, learning-by-doing, and organizational change;
- ***Improvements in governance and institutional efficiencies*** (e.g., rule of law, contract enforcement, reduced corruption, etc.);
- ***Increased openness to trade*** and competition; political and macroeconomic stability.

Growth Impact

Increasing population and physical capital generally lead to short-term growth. ***Technical progress increases the quality of capital and efficiency of production processes, which can increase labor productivity and contribute to long-term economic growth.***

Human capital can be increased and accumulated through investment in people: more and better education, job training, and improvement in health conditions.

Policymakers focus on strengthening the enabling environment to promote development

Technology Policies

Governments often promote the adoption of new technologies and better management practices.

R&D Promotion includes incentives and training programs to help firms adopt new technologies that improve the productivity of capital.

Programs also reduce cost of new research that can create valuable, new technologies.

Governance Policies

Education policies often aim to expand access and quality of education.

Economic Governance Strengthening Programs promote investment, reduce corruption, and increase coordination in an economy.

Free Trade Promotion seeks to reduce barriers to trade, ensuring low-cost material inputs, and efficient allocation of labor and capital.

Ease of Doing Business

Economic governance is often as important as developing and adopting new technologies for development. Strong economic governance ensures that firms can invest in new capital easily and securely, which will lead to increased economic growth.

Data Source: The World Bank has established an Ease of Doing Business index to track economic governance around the world over time. *Look up your country here*.

Learn how better economic governance is key to economic development

Governance & Economic Development

Professor Edmund Malesky

Edmund Malesky is a political economist and a noted specialist in economic development, authoritarian institutions, and comparative political economy in Vietnam. Dr. Malesky's research uses applied quantitative methods and field experiments to explore the intersection of Comparative and International Political Economy. His research includes the political influence of foreign direct investment and multinational corporations. Dr. Malesky is also highly active in applying his research to policymaking.

Development Economics Applications

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Development Interventions and Policies

Duke SANFORD | CENTER for INTERNATIONAL DEVELOPMENT

Development Interventions and Policies

How do we realize development?

Theory to Policy

In our previous module, we examined growth as a product of several factors – population, physical capital, human capital, and productivity.

To help us move from theory to application, we will look at several common interventions and policies that target particular determinants of growth. We will look at the ***evidence*** around some of these interventions and their ***effectiveness***.

Population and Sustainable Growth

How do we support family planning programs?

Numerous programs attempt to change family decisions around childbearing

Population

In developing countries, many policies try to reduce the birthrate to improve welfare – households will need fewer inputs –like food, housing, and education.

Mass Media Campaigns

Common government campaigns use mass media to deliver a general family planning message – using newspapers, radio, TV, and other platforms to reach a wide audience.

Family Planning Programs

Many programs strengthen and expand efforts to promote the uptake of family planning services among households.

Mass media campaigns need to be carefully designed to change health behaviors

Program Impacts

A review of public health campaigns found that programs that simply provide information and messaging often do not lead to changes in important outcomes.

Effective campaigns often need to provide concrete steps and recommendations, as well as why these steps are important.

Example Campaign

Indonesia's national family planning campaign, "Two Children is Enough", has been in place for decades. It is unclear how effective messaging continues to be, especially at tackling underlying barriers to contraceptive uptake (e.g., lack of information, social taboos, and gender biases).

Alternative Media Impacts

Mass media campaigns compete for attention with other types of media. Two analyses found that popular soap operas significantly influenced family sizes by forwarding narratives that feature smaller family units.

An analysis of a soap operas in Brazil found that exposure to telenovelas significantly reduced overall fertility.

A study of soap operas in India found similar fertility impacts.

Source: Abdul Latif Jameel Poverty Action Lab (J-PAL). 2021. "Designing information campaigns to increase adoption of healthy behaviors." J-PAL Policy Insights. Last modified August 2021.; Duryea, S., La Ferrara, E., & Chong, A. (2008). Soap Operas and Fertility: Evidence from Brazil. Jensen, R., & Oster, E. (2009). The power of TV: Cable television and women's status in India. The Quarterly Journal of Economics, 124(3)

Successful family planning campaigns that increase contraceptive uptake use several techniques

Program Impacts

Several successful campaigns used the following principles to help increase the uptake of family planning services in developing country settings:

Salient and Accurate Information

A radio campaign in Burkina Faso focused on filling information gaps in communities that were concerned about contraceptive side effects.

An evaluation of this program found that the campaign significantly increased contraceptive uptake.

Improving Access to Family Planning

In some cases, various logistical and financial barriers prevent people from accessing family planning services.

A study in Malawi found that offering free clinic transportation, at-home counseling, and reimbursements reduced pregnancy likelihood and increased birth spacing.

Program Targeting

In many countries, contraceptive use remains taboo, and women may have less power over reproductive choices.

An evaluation in Zambia by Duke University researcher Erica Field found that providing women with private family planning services made them more likely to use the services.

Source: Innovations for Poverty Action. (2021, June). Increasing Demand for Modern Contraception in Burkina Faso with a Mass Media Campaign. ; The Impact of Family Planning on Fertility, Birth Spacing, and Child. (2021, November 5). Innovations for Poverty Action. Contraceptive Adoption, Fertility, and the Family in Zambia | The Abdul Latif Jameel Poverty Action Lab (J-PAL).

Policies for Capital Accumulation

How do families and individuals invest in capital?

Savings and credit are key components for investment in household capital

Physical Capital

Two popular development interventions try to promote household credit and savings to weather economic shocks and increase investments in capital.

Microfinance Programs

Programs that increase ***access to small amounts of credit*** are a common intervention used around the world.

Household Savings Programs

In contrast to providing credit, other interventions focus on ***encouraging families to save income*** for future consumption and investment.

Microfinance programs are very common throughout the developing world

Program Overview

Microfinance programs offer access to credit to individuals and firms, typically through small loans.

Target Audience

Loans are usually aimed vulnerable populations that do not have access to formal credit systems, especially women and rural households.

Goal

Microfinance programs aim to help individuals achieve several goals:

- Generate new economic opportunities by allowing individuals and firms to invest in critical inputs (e.g., equipment , agricultural inputs, etc.), and
- Provide a cushion against severe economic shocks that destabilize household consumption (e.g., illness, natural disaster, etc.)

Program Scope

Microfinance programs initially came to fame in Bangladesh when they were first developed by Grameen Bank and Muhammad Yunnus in the 1970s.

According to a 2019 report on microfinance worldwide:

- Total value of microfinance loans stood at $124 bn
- ~140 mn people were active borrowers
- Latin America ($48.3 bn) and South Asia ($36.8 bn) had the largest portfolios of microloans

Despite their popularity, microfinance programs have shown mixed results in reducing poverty

Microfinance program impacts have been evaluated across a variety of settings through rigorous randomized evaluations.

Positive Findings

- Microfinance can help support small-scale entrepreneurs. Several recent studies show that small-scale entrepreneurs have better access to high-return investments through microloans.
- In one study in India, access to micro credit raised investment, labor input, and revenues for low-income micro-entrepreneurs who had businesses before they received microcredit.

Null Findings

A rigorous analysis of seven evaluations from around the world found :

- Demand for many of the microcredit products was modest in many cases.
- Microcredit access often does not lead to substantial increases in income.
- Although expanded credit access did lead some entrepreneurs to invest more in their businesses, these investments rarely resulted in profit increases.

Source: J-PAL and IPA Policy Bulletin. 2015. "Where Credit is Due." Cambridge, MA: Abdul Latif Jameel Poverty Action Lab and Innovations for Poverty Action

Many savings programs around the world try to change individual behavior

Program Overview

In contrast to microfinance programs, savings programs often try to shift behaviors to help individuals save money. ***Successful programs that have focused on different barriers to saving have shown varying levels of success.***

Savings Reminders

Some interventions use reminders to nudge individuals to increase their savings commitments.

Commitment Savings Products

Some savings devices try to help users make smarter spending choices, restricting fund usage through fees on early withdrawal or withdrawal blackout periods.

Reducing Barriers to Saving

Other programs simply focus on making formal saving easier, improving financial inclusion through opening new bank accounts and use of direct deposits.

Various savings programs have shown some positive impacts on beneficiary welfare

Program Impact

In contrast to microfinance programs, savings programs often try to shift behaviors to help individuals save money. ***Different programs that focused on unique barriers have shown varying levels of success.***

Savings Reminders

An evaluation in Bolivia found limited evidence that SMS reminders increased bank savings amounts among clients.

Commitment Savings Products

Commitment savings devices in the Philippines improved average savings by over 82%, potentially helping clients with self-control challenges.

Reducing Barriers to Saving

A study with the Bank of Malawi found that farmers with bank accounts kept larger savings balances, cultivated more land, and invested more in inputs.

Source: Text message reminders and incentives to save in Bolivia. The Abdul Latif Jameel Poverty Action Lab (J-PAL). (n.d.).; Commitment savings products in the Philippines. The Abdul Latif Jameel Poverty Action Lab (J-PAL). (n.d.).; Reducing Barriers to Savings in Rural Malawi. The Abdul Latif Jameel Poverty Action Lab (J-PAL). (n.d.).

Building up Human Capital

How do families and individuals become healthier and smarter?

Programs focused on human capital development are key to development

Human Capital

Health Programs

Health programs prevent serious illness and death, thereby ensuring they can still contribute to economic activity.

Common programs include the following:

- Immunization programs for babies & infants
- Health insurance programs for impoverished person
- Distribution of prophylactic medicines

Education Programs

Education programs make workers more productive and equip them with important skills.

Common programs include the following:

- Early childhood education and pre-school programs
- In-school pedagogy innovations
- Vocation training programs for unemployed workers

Health programs often focus on promoting an individual's consumption of services and products

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Incentivizing people to invest in their own health can have long-term impacts and savings

Concept Overview

Investments in health care can often prevent an individual from contracting severe illness or dying. However, beneficiaries may not completely appreciate the full benefits of these investments.

Financial incentives can help beneficiaries more appropriately weigh and assess future benefits. As such, incentives can increase consumption of health services.

Program Example

Vaccine Incentives in India

A study of an incentive program in India for parents that immunized their children found that incentives increased the proportion of children completing full vaccine regimes. A subsequent cost-benefit analysis found that, while financial incentives may costly, incentives were more cost-effective than other interventions like setting up mobile clinics.

Considering Root Causes

While incentives can potentially promote preventative health investments in some contexts, it may not be appropriate for all settings. Incentives may not be appropriate in promoting health investments when:

- There are significant barriers to accessing healthcare services (e.g., lack of clinics and professionals, distance to service providers, etc.).
- There is broad skepticism in effectiveness and safety of health investments.

Source: Banerjee, Abhijit Vinayak, Esther Duflo, Rachel Glennerster, and Dhruva Kothari. 2010. "Improving Immunisation Coverage in Rural India: Clustered Randomised Controlled Evaluation of Immunisation Campaigns with and without Incentives." BMJ 340-222.

Individuals are very sensitive to price of investments in healthcare products

Concept Overview

Despite well-known benefits of proven health products, some of these innovations are *under-consumed*.

Providing health products for free may significantly increase consumption of health inputs. Research has shown that even small price increases can significantly reduce consumption of health inputs.

Program Example

Free Anti-Mosquito Bed Nets in Africa

A study on demand and willingness to pay for anti-mosquito bed nets found that even small price increases above a free price point significantly reduced demand. Importantly, people who received bed nets for free used the products just as much as those who paid for the bed nets – undermining traditional thinking about value of inputs provided for free.

Considering Price Sensitivity

Research has examined price sensitivity for a range of health products across various locations throughout the world. Similar responses to prices for health products have been observed for a range of items:

- Anti-Mosquito Bed Nets
- Deworming Pills
- Water Disinfectant Tablets
- Anti-microbial Soap

Source: Abdul Latif Jameel Poverty Action Lab (J-PAL). 2018. "The impact of price on take-up and use of preventive health products." J-PAL Policy Insights. Last modified May 2018.

Education interventions can target individuals from infancy to adulthood

Human Capital

Health Programs

Health programs prevent serious illness and death, thereby ensuring they can still contribute to economic activity.

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- Health insurance programs for impoverished person
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Common programs include the following:

- Early childhood education and pre-school programs
- In-school pedagogy innovations
- Vocation training programs for unemployed workers

Early childhood interventions can have lasting impacts on a range of outcomes

Program Overview

Many education interventions aim to promote psychosocial stimulation of newborn children, especially in households with first-time mothers.

Developing Country Context

A 20-year study in Jamaica found that weekly visits by community health workers increased schooling, cognitive abilities, and household earnings.

Developed Country Context

A series of studies found nurse home visitation programs for first-time mothers in the US, UK, and Netherlands decreased child neglect and improved cognitive outcomes.

Source: Gertler, P., Heckman, J., Pinto, R., Zanolini, A., Vermeersch, C., Walker, S., ... & Grantham-McGregor, S. (2014). Labor market returns to an early childhood stimulation intervention in Jamaica. Science, 344(6187), 998-1001; Social Programs that Work. (2020, January 3). Nurse-family partnership - Social Healthcare programs that work. Social Programs that Work.

Training programs are common, but often need to respond to training context

Program Overview

Many countries have robust ***vocational and business training programs*** to help workers and small firms improve productivity and growth, with the aim of increasing profits. However, a large review of randomized evaluations has found that training alone is often insufficient in creating profits. Training and skills programs often create the most impact when tailed in the following manner:

Customize and Tailor Skills

Training programs are often too general and do not respond to specific challenges faced by workers. Skills also need to match firm size and complexity.

Address Contextual Barriers

Impacts of evaluated programs often differ based on participant education and gender, suggesting that interventions also need to address social and cultural norms.

Cash Transfer Programs

Cash transfers and loans may help provide additional capital for individuals to apply new training or skills. However, impact may be short-term.

Source: Abdul Latif Jameel Poverty Action Lab (J-PAL). 2019. "Teaching business skills to support microentrepreneurs." J-PAL Policy Insights. Last modified December 2019.

Increasing Productivity

Policies for long-term growth

In addition to inputs, growth is often about improving technology and productivity

Productivity

Interventions that increase productivity can take many forms, across a broad swath of sectors. These interventions are particularly important in agriculture and governance.

Agricultural Innovation

Agricultural productivity programs often focus on trying to increase the uptake of new technologies, adoption of innovative methods, and greater use of data to inform practice.

Economic Governance

Households and firms may find it difficult to access technology, get permits or licenses, and/or guarantee contract enforcement if the enabling environment does not promote rule of law.

Agricultural interventions often try to increase uptake of *new technologies and techniques*

Program Overview

Many countries have extensive ***agricultural extension programs*** to help farmers improve farm productivity, but these programs are often outdated and fail to engage their audience. Several methods have shown promise in improving extension program effectiveness.

Actionable Data

Information for farmers is more effective when it responds to specific contexts and is easily understood, so that farmers know how to respond.

Demonstration Programs

Extension programs can provide live demonstrations of techniques and tailor training on specific inputs.

Social Networks

Farmers are more likely to adopt new technologies and techniques when they learn from reputable or influential local sources.

Various methods have shown promising results in promoting agricultural productivity.

Program Impact

Extensive economic research has identified several methods that could improve extension program effectiveness – thus increasing uptake of new technologies and improving overall farm productivity.

Actionable Data

Interactive data provided during planting season over SMS has shown improvements in crop yields in India. Localized charts in Bangladesh helped improve timing of fertilizer application.

Demonstration Programs

A study in India found that demonstration programs of new seed varieties led to significant increase in uptake. In Sierra Leone, similar demonstrations increased uptake of new rice strains.

Social Networks

Studies in Africa found farmers were more likely to follow advice from people with similar backgrounds and adopted technologies when they saw several acquaintances use said tool.

Source: Abdul Latif Jameel Poverty Action Lab (J-PAL). 2018. "Improving extension services to increase smallholder productivity." J-PAL Policy Insights. Last modified April 2018.

Policies focused on reducing corruption play an important role in improving productivity

Reducing Corruption & Promoting Growth

Professor Edmund Malesky

Edmund Malesky is a political economist and a noted specialist in economic development, authoritarian institutions, and comparative political economy in Vietnam. Dr. Malesky's research uses applied quantitative methods and field experiments to explore the intersection of Comparative and International Political Economy. His research includes the political influence of foreign direct investment and multinational corporations. Dr. Malesky is also highly active in applying his research to policymaking.

Cross-cutting Policies

While it is tempting to approach development challenges as separate issues that require unique responses, many policies approach development in an integrated manner. These holistic policies aim to overcome development challenges through several different pathways.

In this section, we will take a closer look at two interventions that have grown in popularity over the past decade – Cash Transfers and the "Graduation Program."

Cross-cutting development programs try to empower poor families

Cross-cutting policies often recognize that development challenges are more complicated than solving a health issue, educating a child, or offering credit.

Cash Transfer Programs

Cash transfer programs are a common intervention that provide regular payments to poor families, helping them cover living expenses and mitigate economic shocks

The Graduation Program

The graduation program provides holistic livelihood support to beneficiaries – financial, training, capital – to help them move out of poverty.

Cash transfer programs have been used by governments for over two decades

Program Overview

Cash transfer programs aim to empower and support individuals and families to invest in their own self-identified needs. Cash transfers are often *conditional* and require beneficiaries to meet certain goals or requirements (e.g., attending school, receiving immunizations, etc.)

Target Audience

Programs typically target poor individuals or families that fall under a specified income threshold, or certain populations that meet strict program criteria (e.g., pregnant women, women with children, etc.)

Goal

- Provide individuals/families with cash to invest in family needs.
- Incentivize positive behaviors like vaccination, school attendance, etc.
- Replace often burdensome and complex in-kind support programs.

Program Design

Cash transfer programs have been more widely used over the past two decades by governments and NGOs. Program designers have to address some of the following aspects:

Targeting – Who will qualify for a cash transfer?

Labeling – Will any information accompany cash transfer, especially information regarding spending?

Amount – How large should a cash transfer be?

Modality **–** How are beneficiaries paid?

Learn how cash transfer programs are effective tools for promoting development

An Overview: Cash Transfer Programs

Professor Manoj Mohanan

Manoj Mohanan is an applied microeconomist, focusing on health and development economics, with a background in medicine and public health. His research focuses on topics related to health and health care in developing countries including: performance-based contracts, measurement of provider quality and performance, social franchising, and social accountability / monitoring. He also studies the role of subjective expectations and beliefs in health care behavior. Several of his projects feature field experiments, policy interventions and evaluations.

Two of the oldest programs in Latin America have shown impacts on a variety of outcomes

Progresa/Prospera Program

A well-known conditional cash transfer program in ***Mexico***, this program provided cash transfers to mothers, contingent on children attending schools and health centers.

Evaluation Findings

Evaluations of the program found positive impacts on education, health, and nutrition, including the following:

- Increase in average schooling duration by 8-10 months
- Reduction in anemia prevalence among children by ~12 percentage points.
- Significant reduction in rural poverty

Bolsa Familia Program

A 2003 conditional cash transfer program in ***Brazil*** that requires cash recipients to ensure school attendance and vaccination of all children.

Evaluation Findings

A World Bank analysis of the program found:

- Improvements in key education indicators, including enrollment, progression, and lower dropout rates
- Administrative gains by streamlining several previously existing welfare programs
- Expanded social welfare access to poor families who previously were unable to access safety nets.

Source: World Bank Group. (2014, November 19). A Model from Mexico for the World. World Bank.; World Bank Group. (2020, April 22). Strengthening Conditional Cash Transfers and the Single Registry in Brazil: A Second-Generation Platform for Service Delivery for the Poor. World Bank.

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The *graduation program* is a holistic intervention that gives families a variety of inputs

Program Overview

In contrast to a straight-forward cash transfer program, the Graduation Program consists of six complementary components, each designed to address specific constraints facing ultra-poor households.

- ***Capital asset transfer:*** One-time transfer of productive assets, such as livestock or supplies for petty trade
- ***Technical skills training:*** Training to manage the productive asset
- ***Financial Support:*** Regular cash or in-kind support for a few months to a year
- ***Savings Support:*** Access to a savings account, or encouragement to save
- ***Coaching Sessions:*** Frequent home visits by implementing partner staff to provide accountability, coaching, and encouragement
- ***Health Services:*** Health education, health care access, and/or life skills training

Source: World Bank Group. (2013, April 24). Graduation Program: Creating Pathways out of Extreme Poverty into Sustainable Livelihoods. World Bank.

The *graduation program* has shown positive impacts in settings worldwide

Program Impact

Randomized evaluations of the graduation program have taken place in Bangladesh, India, Pakistan, Ghana, Peru, Honduras, and Ethiopia.

Economic Impacts

- Evaluations found household consumption increased by 5.8 percent, on average.
- Improved economic outcomes persisted well after participation.
- These encouraging results held up across a variety of implementing partners across the 7 countries.

Social Impacts

- Participants in the program showed significant psychological improvements, reporting higher levels of happiness and reduced stress levels.
- Participants also showed increased levels of political participation in some contexts.

Program Sustainability

On average, programs demonstrated positive returns on investments within three years of beneficiaries participating in the program. At some program sites, household consumption totaled two to four times more than the cost of the program inputs after three years.

Source: Abdul Latif Jameel Poverty Action Lab (J-PAL). 2015. "Building stable livelihoods for the ultra-poor." J-PAL Policy Insights. Last modified September 2015.

Our framework for determinants of economic growth helps us understand how specific policies can potentially drive growth. We supplement this framework with evidence to show how current policies lead to impact.

Visit the online version of the toolkit here.