

Identify Scarcity.
Recognize Tradeoffs.
Weigh Opportunity Costs.
Maximize Utility.



SETTING YOUR MINDSET

To avoid potential frustration, it's important to make a few things clear right up front. First, although *Economics & State* looks like a game, it is not. It's a simulation. This is an important distinction. Second, think of it as a product that is still "in Beta."

Games are played for fun, for the purpose of winning. Simulations are played for the purpose of learning. While *Economics & State* can definitely be fun (if you take it seriously enough to engage, but not so seriously as to let events that occur during it ruin your day, for example), *there is no clear winner in this simulation*. In fact, "winning" - and what that even means - is a matter of debate that we discuss at the end. We keep score (using economic and military indicators), but what the scores mean is a matter of interpretation that will depend upon the context of the situations that nations faced in the simulation. And every class period unfolds uniquely.

Any simulation as complex as *Economics & State: Trade and Develop* is going to have to some imbalance. Issues will arise. Adjustments will need to be made. A certain amount of patience and willingness to experiment is immensely helpful (just as they are in life). In reality, leaders *don't* know how things will turn out either. They make plans based on what they think they know, but life has no reliable guide book, and unpredictable events can occur at any moment. We *do* have a guide, but that book is provisional and will change, as needed.

THE BIG IDEAS: WHAT ARE WE TRYING TO LEARN?

There are two key areas of introductory Economics we have not yet learned about: *international trade and developmental economics*. Economics & State attempts to teach them through learning by doing, with some brief mini-lessons along the way.

Why are some countries wealthy while others are impoverished? Does trade help or hinder nations in their development? What benefits does trade bring? Are there any risks? What are the barriers to productive trade? How does war affect economic development? What incentives work best to motivate workers to increase their productivity? How do nations boost productivity levels so that their long run aggregate supply increases? These are just a few of the questions that this simulation attempts to address. It does this by attempting to put you in situations that force you to work together to make difficult choices, that require the weighing of tradeoffs and recognition of opportunity costs, in an effort to maximize utility. In other words, the simulation also is an enactment of the "Big Ideas of Economics" with which we began the semester. While much of the work we have done so far in the class has been theoretical, *Economics & State: Trade and Develop* creates concrete situations to which you must respond, and decide. Regardless of the outcomes of your decisions, there will be something to consider and discuss, as well as connect to the actual world (past and present).

The nations in the simulation aim to pass through three levels of economic development, based upon the actual **Human Development Index (HDI)** that is a measurement of GNI (though in this simulation we will use GDP), life expectancy, and literacy rates. All nations start at HDI 1 (the rough equivalent of nations in the 1500-1750 time period), with varying tangible resources and, at first, the same amount of money to put to work. Where will your nation end up on the HDI scale? How developed will it be? How militarily powerful or weak will it be? How will it have changed the world through discoveries, resource development, the founding of corporations, the construction of architectural wonders and the creation of products? We're about to find out.

THE BIG PICTURE: HOW ECONOMICS & STATE WORKS

There are five stages to an Era during the simulation, and three roles that you will play.

After initial setup for an Era (gathering tangible resources, from which products are made and adding money to the nation's Treasury), **the first stage is Hiring, Sourcing & Purchasing**. Think of this as an opportunity to combine the Four Factors of Production (land/resources, labor, capital, entrepreneurship)

that we learned about earlier, in order to make products in the next stage. During this stage, the nation's **Prime Minister** (leader) selects which government investments to make (Public goods or new armies? Resource exploration or the development of knowledge and technology? Colonization or the creation of Lego Wonders, or the founding of corporations?) Meanwhile, the **Hiring & Production Minister** will hire people in the nation (along with any of those in another nation with whom you have a trade route and a labor agreement) to make stuff during . . .

. . . **the second stage, which is Production**. Everyone in the class will have 1, 2 or 3 jobs (for which you receive a negotiated salary, based off the minimum for the type of job and your nation's HDI level) to perform during this time, making the crops, clothing, luxury goods, structures (Lego improvements and Lincoln Logs housing) and manufactured goods that are sold in the next stage.

World Trade is the third stage of the simulation. Every product in the simulation has an assigned Utility Points level (UTILs), and is made available for sale (along with tangible resources and trading card resources like Oil, Steel and Gold) during the World Trade stage. *Everyone in the simulation operates on an individual level as a consumer* during World Trade, aiming to buy goods in order to earn enough SURVs (survival points) to stay alive and as many UTILs as possible. You track these purchases and report them to the **Trade Minister**, who records them for the nation as a whole. Some nations will end up with a trade deficit, while others will have a trade surplus (which is one of the indicators reported each Era).

Nations have the opportunity to make World

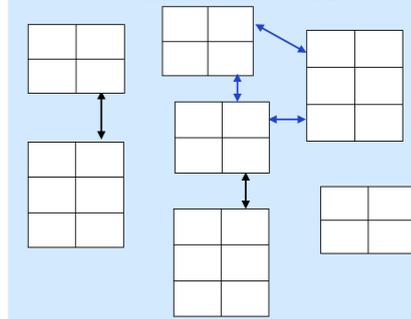
Announcements during **War and Diplomacy**, which is the

fourth stage of an Era. If war is to be conducted, it must be formally declared during Announcements. No more than 2 wars may be conducted in one Era, and we will go in the order in which they are declared. However,

this is also an opportunity to strike important international agreements, such as free trade agreements, labor agreements and resource concessions contracts. Each of these can be conducted and agreed to by the **War & Diplomacy Minister** (with the permission of the Prime Minister). If war is conducted, the **War & Diplomacy Minister** will roll the dice and carry out strategy, as directed by the Prime Minister. Think carefully, before war begins, whether you are willing to put your nation's future at the mercy of a roll of the dice.

Having hired, produced, bought and sold, negotiated or fought, the indicators are tallied and updated on the "Scoreboard" during **the Indicators, Random Events & Reflection stage**, which concludes an Era. Ministers meet to adjust strategy for the next Era, and there may be connected class discussion or a related mini-lesson about topics that arose. And then, it all repeats: the three roles of individual consumer, production worker and government minister.

A WORLD MADE OF DESKS



ECONOMICS & STATE: TRADE AND DEVELOP

FROM INDICATORS . . .

There are 3 HDI (Human Development Index) levels in the simulation, roughly correlating with highly developed agricultural states in an emerging world economy (HDI 1), industrializing nations (HDI 2), and highly developed post-industrial nations (HDI 3).

HDI INDICATORS

GDP = The value of all the goods and services produced in your nation during an Era.

Life Expectancy = Determined by your HDI level and access to health care services, this measures how long an individual born in your nation today would be expected to live.

Literacy Rates = The percentage of adults in your society who can read and write and perform basic calculations (thanks to your HDI level and access to education).

OTHER INDICATORS

Utility = Based on the cumulative utility points acquired by members of your nation.

Prestige = Some societies gain more cultural prestige and influence on the global stage, due to discoveries, Wonders of the World, leading corporations and other structures or creative products.

Military = The approximate strength of the nation's military forces, based on HDI level and the strength and number of dice armies developed divided by number of desks controlled.

Trade Balance = Indicates whether the nation is running an overall trade deficit or trade surplus with all other nations combined, during an Era.

How to improve?

To access many Public Goods, and to boost economic growth, build a Lego Courthouse

To increase economic growth, consider . . .

To increase life expectancy, consider . . .

- * Building Lego Clinics and Hospitals (HDI 3)
- * Public Goods investments: Public Immunizations (PG7), Social Security & Strong Safety Net (PG8), Universal Health Care (PG9)
- * Ending any wars that may be causing significant casualties
- * Making sure individuals are buying enough food

To improve literacy rates, consider . . .

- * Building Lego Schools and Universities (HDI 2)
- * Public Goods investments: Compulsory Elementary Ed (PG4), Compulsory Secondary Ed (PG6), Universal University Education (PG9)

To improve Prestige, consider . . .

- * Building a Lego Palace and/or Tower of Greatness
- * Building Lego Architecture Wonders (Brandenburg Gate, Big Ben, White House, Eiffel Tower, United Nations, Sydney Opera House)
- * Founding corporations (East India Co., Tiffany & Co., U.S. Steel, Standard Oil, Ford, Boeing, Apple, Paramount Pictures, and others)
- * Invest in researching and developing more areas of Knowledge (from Higher Education to Microchips), or acquiring their Knowledge cards during World Trade or Hiring, Sourcing and Purchasing

To strengthen your military, consider . . .

- * Building Armies (costs money, resources + a Lego structure; generates 3 dice)
- * Upgrading your dice from green (HDI 1) to purple (HDI 2) to red (HDI 3), by acquiring the necessary resources
- * Consider founding military-connected companies in steel, oil, planes

. . . TO POLICIES

Lego Farms and Mines allow you to generate more tangible resources (string, food paper, tissue paper, Legos, beads, tea leaves) per Era, during Setup.

Lego Modern Farms (HDI 2) and Tractors (HDI 3) automatically produce trading cards of wheat, corn or lettuce that you can sell during World Trade.

Lego Factories (HDI 2) and Assembly Lines (HDI 3) automatically produce trading cards of clothing or appliances to sell later.

Public Goods investments like Roads, Bridges & Ports (PG1), Property Rights (PG3) and Non-Excessive Regulation (PG5) can boost GDP numbers.

Corporations (from U.S. Steel to Apple) can be founded to make lucrative new product trading cards (rings, devices, cars, etc.) to sell.

New crops (such as lettuce, tomatoes or pineapple) can be developed to provide additional GDP and exports during World Trade.

To improve Utility, consider . . .

- * Encouraging individuals to buy more high UTIL products; if few are available, develop them (Lego Factories & Assembly Lines; corporations)
- * Raising salaries or lowering taxes to enable individuals to buy more high UTIL products
- * Ending any lengthy and costly wars that are not going well
- * Creating more and better Housing (Lincoln Logs)
- * Increase entertainment options by building a Lego Theater (HDI 2) or two, or by encouraging citizens to buy movies during World Trade

To improve Balance of Trade, consider . . .

- * Developing more high UTIL products (foods, luxury goods, manufactured goods, corporate goods) for sale as exports
- * You could resort to protectionism (taxing competing foreign goods), or discouraging imports, but this will likely hurt you in other areas (e.g., Utility)