

INTERNATIONAL ECONOMIC ANALYSIS

What is the international economic system and how can our knowledge of it benefit you as a legal practitioner?

The international economic system can be defined as an economic system whereby market actors, regulations, and products and services are linked together involving cross-border issues. It is essentially composed of three major elements: (1) economic (market) actors and (2) market regulators (and regulations) functioning within (3) a greater economic (financial/market) system.

This chapter will focus on the third element—the greater international economic system itself. In a way, this can be viewed as the “operating system” in which the wheel of commerce continuously moves across borders.

One core part of the foundation underlying the international economic system is the free market system that powers the global economy. Before the collapse of the Soviet Union in the early 1990s, several competing economic systems existed, such as capitalist (free market), socialist, and various “hybrid” versions of the two. Up until the early 1990s, these were the main forms of competing capitalisms, including Germany’s “Rhineland capitalism,” the Japanese system, and the Anglo-American system.

But following the collapse of the Soviet Union (not too long, incidentally, after it reached its apex of power), there was an increasing convergence toward the free market system of capitalism. By the late 1990s, the virtues of the Anglo-American capitalist system became ever-apparent, and it became the dominant system in the world.

As practitioners, you may hear clients talk about demand and supply-side factors. Although these terms are heard and used in various circles at a general level, as lawyers we get paid to be exact. So to provide the best client service possible, we must understand the international economic system clients face every day.

Thus, the best place to begin in terms of understanding the building blocks underlying the international economic system is with the concept of supply and demand. Although many may think they already know the principles underlying supply and demand, these concepts are of such paramount importance to the international economic system that a clear step-by-step explanation should be the starting point.

A main takeaway is that supply and demand work together to accomplish one main objective: to set prices. The issue of price setting is important for clients, and so are its driving mechanisms. Significantly, prices affect everyone at many levels, from the price of oil in the commodities exchange market to the price of bread at the supermarket. Thus, when the issue of price arises among clients, the information in this chapter will help you guide or understand the client's analysis of the factors that may have influenced a certain price level.

Supply and Demand

One aspect of the free market (capitalist) system is its ability to determine prices. This is also sometimes referred to as the “invisible hand” of the markets (i.e., relatively unfettered market forces, which is a function of supply and demand coming together at an “equilibrium price”).

The next few paragraphs will discuss the concepts of supply and demand as they affect the “markets.” You have probably heard clients refer to the markets in relation to a commercial deal. But what does that mean exactly? In essence, the notable part of the markets is composed of traders who place buy and sell orders of major goods and products. For example,

the price of oil is set by commodities traders around the world (primarily New York, Chicago, London, Tokyo, and Hong Kong) executing buy and sell orders for certain types of oil at certain prices. When a buy order at a certain price range meets a sell order at a certain price range between two parties, then the transaction is executed, which creates one equilibrium price. The combination of all such buy (demand) and sell (supply) orders creates an equilibrium price level.

At a more conceptual level, prices are set by a convergence of supply and demand toward a market equilibrium price level. From an economic purview, the supply curve is an upward sloping curve in which the vertical axis reflects price (P) and the horizontal axis reflects quantity (Q).

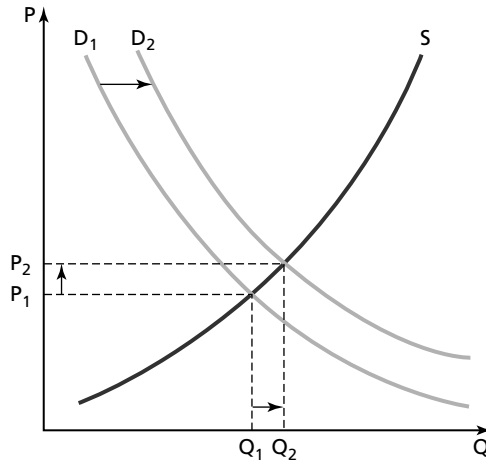
Thus, an upward sloping supply curve reflects the notion that, as prices of goods and services increase, the quantity of similar goods and services will also increase. As shown in Figure 1.1, as the price level increases along various points within the supply curve the quantity produced (supplied) will increase. In other words, from a supplier perspective (manufacturers, sellers, etc.), higher prices will provide a market incentive to increase supply (i.e., to make more products for more potential profit). This is because, *ceteris paribus* (a Latin term commonly used in economics that means “everything else being equal”), higher prices translate into higher revenue and profits.

Further, from the demand side of the equation, the demand curve is a downward sloping curve (in contrast to the upward sloping supply curve) within the same graphical equation in which the vertical axis reflects price (P) and the horizontal axis reflects quantity (Q).

This demonstrates that, as prices of goods and services increase, the quantity (of similar goods and services) will similarly decrease. Here, as the price level increases along various points within the demand curve, the quantity consumed falls. In other words, from a consumer perspective (e.g., buyers), the higher the price, the lower the quantity purchased of such goods or services since buyers generally prefer cheaper products to more expensive ones. Conversely, the lower the price, the higher the quantity purchased (demanded) of such goods or services.

Figure 1.1 illustrates the concepts discussed above, in which supply and demand meet to set prices.

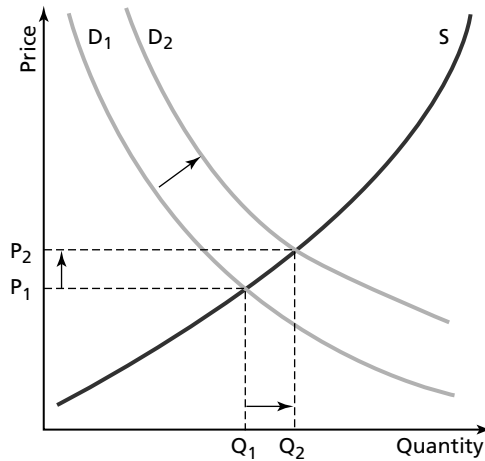
Figure 1.1



Related to the notion of higher and lower levels along the demand and supply curve, both the supply and demand curve can also shift upward or downward (separately or together), which also affects market prices. A shift in the demand and supply curve reflects changes in the amount of demand due to factors other than price (e.g., shifts in the demand and supply curve occurring even when prices remain the same). Such factors can include the price of substitute or complementary goods, income, and population levels. For example, when consumer incomes rise, a shift outward of the demand curve occurs. And when, for instance, a technological advancement occurs, this shifts the supply curve outward (since better technology will have helped to increase supply). In contrast, a movement along the demand and supply curve, rather than a shift, reflects changes in the amount of consumer demand due to price levels. For example, when prices of a good increase, the demand for that good generally decreases (where an inverse relationship exists between price and quantity, as indicated by the demand curve).

The demand curve can shift based on an increase in demand. How does this happen? An increase in demand can occur based on several factors, including changes in income, tastes, and preferences; complementary and substitute goods; demographics; and market expectations. Thus, if the demand curve shifts (distinguishable from moving upward along the demand curve), this will lead to both a higher price (P_1 to P_2) and higher quantity (Q_1 to Q_2), as indicated in Figure 1.2.

Figure 1.2



Now to a shift of the supply curve. The supply curve can shift right or left based on technological changes and changes in input prices. If such factors favor the supplier, then the supply curve shifts right. This shift denotes a higher quantity level (from Q_1 to Q_2) and lower price level (from P_1 to P_2). This is because positive factors, such as lower input prices needed to make a manufactured, finished product or technological improvements (such as automation, thus increasing efficiency), will mean that more products and services can be supplied at a relatively lower price level.

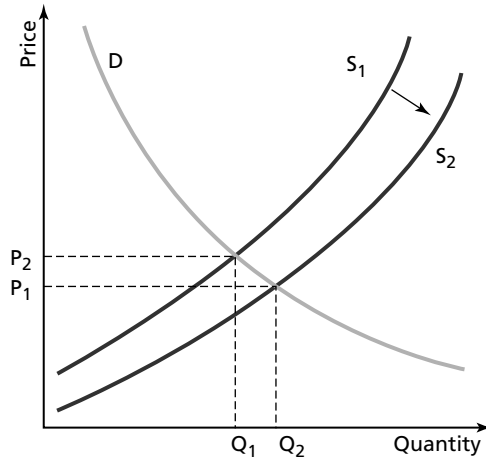
For example, let's take a look at an automobile manufacturer. If the price of steel drops, say by 10 percent, then this represents a lowering of input prices for the automobile manufacturer. This, in turn, will lower the overall cost (and price) of the supplier's finished product, which means that the price will decrease while the quantity will increase.

Figure 1.3 provides an illustration.

The field of economics also has a related important term referred to as "price elasticity," which refers to the sensitivity between price and demand (price elasticity of demand), or alternatively, between price and supply (price elasticity of supply). So, for example, if a very large software company increases the price of its latest operating software package, how much effect such price increase has on demand reflects the notion of price elasticity.

If there is no correlation, either positive or negative, between price and supply, then this is referred to as being "perfectly inelastic" (as represented

Figure 1.3

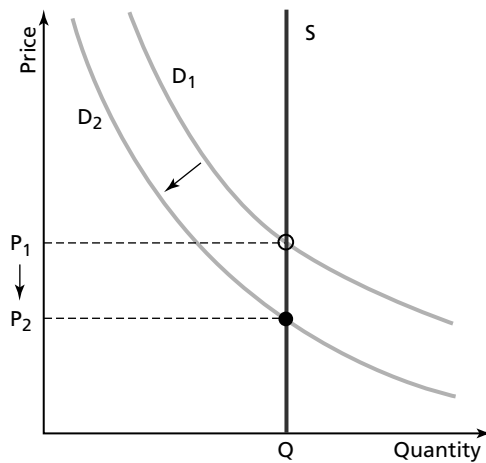


by a vertical supply line, in contrast to an upward [non-vertical] sloping supply curve in a non-elastic supply market).

Figure 1.4 illustrates the point of price inelasticity.

Efficiency can also be increased on the supply side by a concept referred to as “economies of scale.” This is often linked to a lowering of input prices. A classic example of this is when suppliers purchase inputs in large (mass) quantity. Assuming such bulk purchases mean lower per-unit prices, this lowers the per-unit input price of whatever is being purchased in large

Figure 1.4



quantity. At a micro level, this would be similar to buying ketchup in large quantity at Costco to get a lower price per fluid ounce of ketchup.

As a final note regarding the time factor for prices to reach their equilibrium point, it is important to understand that the equilibrium price of goods and services typically occurs in the long run (rather than the short run, since fluctuation may exist in the short run that may or may not be equal to the long-run equilibrium price level).

This section discussed how demand and supply by buyers and sellers, respectively, intersected to set prices. At the international (cross-border) level, similar mechanisms and incentives drive entities and countries to enter into transactions with each other.

The following section discusses the concepts underlying absolute versus comparative advantage; it goes into further detail in terms of understanding why countries trade with each other for certain products even though they are more efficient producers of the products.

Absolute versus Comparative Advantage

Why do countries trade with each other in our international economic system?

The short answer is that international trade is, in certain circumstances, more efficient and value-added for both sides involved. This can be the case even in circumstances where one country is better (more efficient) at producing many products than another country. To explore the nuances of this concept further, we go to a period near the founding of the U.S. republic.

In 1776, Adam Smith wrote one of the seminal texts underlying the free market system. The book was *An Inquiry into the Nature and Causes of the Wealth of Nations* (often simply referred to as *The Wealth of Nations*). The book was a revelation at the time, which argued that countries should engage in trade based on a country's "absolute advantage."

Simply put, absolute advantage means that a particular international economic actor (e.g., a country, firm, or individual) can produce more of a particular good (or service) relative to another economic actor (i.e., it is relatively more efficient at producing a particular good or service). If such absolute advantage exists, then under Adam Smith's view, that particular economic actor can and should specialize and trade in that product or service.

For example, if Country A can produce five high-energy drinks with five workers, while Country B can produce ten high-energy drinks with five workers, then Country B has an absolute advantage in producing the high-energy drink (since it can produce more energy drinks per worker).

This may seem somewhat intuitive, but it leads to a less intuitive question: if a country has an absolute advantage in everything, is it still worthwhile (efficient) for it to trade with other international economic actors?

Portuguese economist David Ricardo's answer was a categorical "yes," based on the rationale in his book, *On the Principles of Political Economy and Taxation* (1817). In the book, Ricardo posited that, even if a country has an absolute advantage in manufacturing a particular good, the country would still benefit from engaging in international trade by specializing in a good in which it has a "comparative advantage" (even if the country has an "absolute advantage" in the two goods being traded between the two hypothetical countries).

For example, assume two countries, A and B, are considering trading with each other. Country A can produce smartphones at 200 labor units and tablet PCs at 220 labor units. Meanwhile, Country B can produce smartphones at 180 labor units and tablet PCs at 160 labor units. In this scenario, Country B has the absolute advantage since it can produce smartphones and tablet PCs at lower labor-unit levels.

Table 1.1 reflects the above trade factors (figures denoted in labor units).

Table 1.1: Trade Factors

	Smartphones	Tablet PCs
Country A	200	220
Country B	180	160

But even if Country B has an absolute advantage in both smartphones and tablet PCs, is it more efficient, given the above, for Country A to enter into international trade with Country B? According to Ricardo's theory of comparative advantage, Country A and Country B are both better off engaging in international economic trade than not (for maximizing each country's economic gain).

Why is this? Under the theory of comparative advantage, Country A would be better off (i.e., more efficient and economically productive) specializing in and making smartphones, while Country B would be better off specializing in and making tablet PCs. Specifically, Country A could trade its manufactured smartphones to Country B, while Country B could trade its manufactured tablet PCs, increasing the overall economic efficiencies (and presumably economic output) while doing so (assuming a one-to-one trading ratio between smartphones and tablet PCs).

The main rationale for this is the notion that it is better to specialize in one area than to be a generalist in many areas. Specifically, Country A can obtain a tablet PC in exchange for 200 labor units (rather than 220, if Country A manufactured the tablet PCs itself). Conversely, Country B can obtain a smartphone in exchange for 160 labor units (rather than 180, if Country B manufactured the smartphones itself).

Adam Smith and David Ricardo explained how it made sense to enter into global cross-border transactions. Thus, many clients enter into transactions with other parties based on similar concepts related to absolute and comparative advantage. The next section discusses a concept that clients sometimes use as a benchmark to determine whether maximum (optimal) efficiency has been reached.

Production Possibility Frontier (PPF) Curve

Clients are often seeking to add the most value possible to each of their transactions. In this spirit, some clients may mention in conference calls that they feel like the transaction is not at “Pareto efficiency.” Or that they are “inside the PPF curve.” As lawyers, many terms that include words such as “curve,” “Pareto efficiency,” and “PPF” can seem unfamiliar and even daunting. But in reality, such terms are not overly complicated, and they reflect concepts underlying how decisions are made in our international economic system.

The terms PPF or PPC curve—acronyms for production possibility frontier or production possibility curve—signify that the most efficient output combinations of two specified products (or services) along an outward sloping curve have been obtained. Any point along the PPF curve reflects optimally efficient outputs at certain levels, as indicated by points A, B, C, and D in Figure 1.5. Put another way, each point on the PPF curve reflects maximum

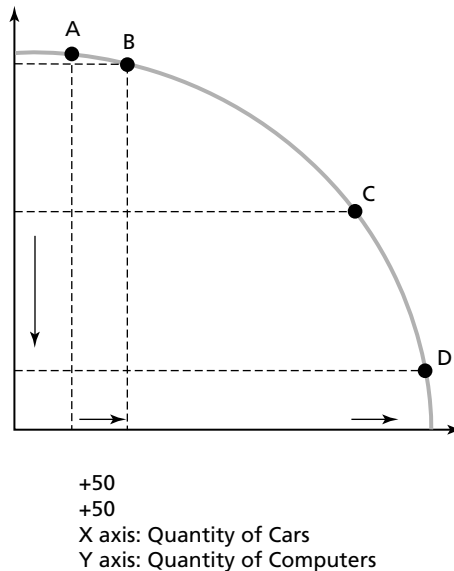
possible production levels given the two relevant outputs. The goal, therefore, for producers is output levels on (rather than inside) the PPF curve.

Any point inside the PPF curve reflects an output level that is not at Pareto efficiency (i.e., it is producing at inefficient levels, thus not making full use of its resources). From an international economic perspective, and for clients in commercial deals, points inside the PPF curve are to be avoided.

From a big-picture perspective, the theory underlying the PPF curve reflects a two-product (or -service) world. Clearly, this is not always the case in the real world with your clients. But it is a useful thinking tool when clients focus on two specific products or services and how to reach Pareto efficiency given those products or services.

Similar to how we saw that the demand and supply curve can shift outward or inward in the earlier section of this chapter, the PPF curve can also shift outward or inward. A shift outward (upward) of the PPF curve, as seen in Figure 1.6 typically indicates that a greater amount of land, labor, or capital exists and/or significant technological innovation has occurred to render possible such greater production levels. Conversely, a shift inward of the PPF curve indicates that the capacity of the economy to produce goods

Figure 1.5



and services may have decreased, such as due to a population decrease, military conflicts, debt problems, and famine or disease.

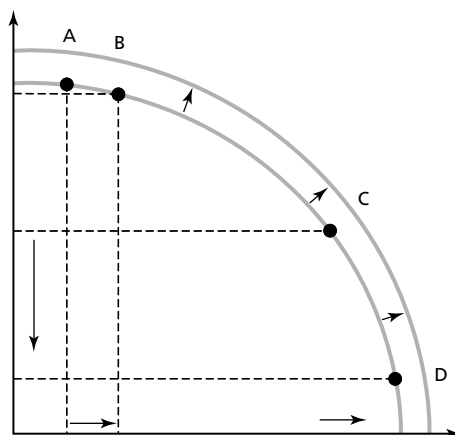
Clients, especially in the private sector, also will mention their “opportunity cost.” In fact, many of those in the financial services industry may view the world in terms of doing one thing at the cost of forfeiting a next-best alternative. For example, since a person can physically be in only one place at a time, making an investment presentation to Bank A may mean giving up another presentation at Bank B.

Applying this thinking to the PPF curve, points farther down the PPF curve (i.e., points along the PPF curve from the upper-left to the lower-right of Figure 1.6) reflect the idea of an opportunity cost in play.

Opportunity cost can therefore be thought of as forgoing a particular good or service to achieve more of another product or service. Take, for example, the initial PPF diagram above in which going from point C to D along the PPF curve means forgoing relatively more computer production units in exchange for gaining relatively more car production units.

Again, each point along the PPF curve represents Pareto efficiency (i.e., maximum possible output points given two input factors). With the

Figure 1.6



+50
+50
X axis: Quantity of Cars
Y axis: Quantity of Computers

opportunity cost concept, the issue is not how to reach Pareto efficiency (as it would be for the PPF curve); rather, the issue is what combination (given the maximum output production) or ratio of products or services relative to another product or service is in use. This means that one good must be given up in exchange for more of another good. In other words, there is a constant give and take along the PPF curve, as reflected by every point along that curve. Thus, it is important to keep in mind, as a legal practitioner, what your clients' preferences may be along their PPF curve.

Although not emphasized in many law school curricula, such concepts are a prevailing theme of many businesses and clients in the United States and beyond (including in many emerging economies).

Another issue that clients may face is how to make the most efficient use of their funds. Many economists think about this issue from the lens of a concept called purchasing power parity (PPP).

Purchasing Power Parity

When transactions (and even clients) go across borders, one question clients may have is “How far will my dollar investment go (or how much can I buy)?” This depends on various factors, including price and inflation levels, which vary from country to country.

Simply put, purchasing power parity reflects how much a particular reference item (e.g., a Big Mac hamburger, as in *The Economist* magazine)¹ can buy (or, conversely, cost) when adjusted for possibly differing price and inflation levels. For example, when adjusted for PPP, it turns out a Big Mac hamburger in Hong Kong (China) may cost less than a Big Mac hamburger in the United States. Thus, if this is the case, then a U.S. tourist in Hong Kong would literally get “more Big Macs for his/her buck (U.S. dollar),” which is generally construed as a good thing from the consumer's standpoint. In other words, the greater the purchasing power of the U.S. dollar, the better it generally is for U.S. clients and investors when entering into overseas jurisdictions and transactions, while the opposite also generally holds true.

At the macro level, countries and large multinational enterprises (MNEs, discussed in greater detail in Chapter 6) try to base their investment decisions, in part, on understanding how much certain products and

services cost, adjusted for PPP. At the end of the day, adjusting for PPP can, and often does, play a pivotal role for international economic actors, both public and private.

The concept of PPP also links to the motivations behind entering into foreign direct investment (FDI), which is described in greater detail below.

Foreign Direct Investment

Your clients may have, or are entering into, various types of investments to maximize profit. Of such investments, many clients may be contemplating entering into foreign direct investment at either the micro (firm) or macro (country) level, both of which this section will describe in detail. Foreign direct investment can be viewed in terms of net inflow (in which more money is flowing inward than outward) as well as net outflow (in which more money is flowing outward than inward). As a general rule, most economic actors receiving FDI view such FDI favorably since this, in effect, means more land, labor, and capital entering the entity's specific operation (domestically from overseas), which can shift the PPF curve outward (in achieving greater maximum total output).

Because of generally positive effects (sometimes called "externalities") of FDI, incentives are often provided to the following economic players (market actors) to invest in the firm/country:

- individuals (usually high-net worth clients)
- MNEs (both private and public)
- financial institutions
- insurance companies
- governments (also called "sovereigns," including sovereign wealth funds, or SWFs).

For the economic actors above, as an incentive to draw FDI into a particular jurisdiction, one or more of the following may be implemented:

- tax breaks (e.g., lower taxes, such as lower corporate taxation)
- subsidies (e.g, funding provided)
- preferential tariffs

- insurance companies (as a means of insuring against economic loss for goods and services being invested)
- export or free economic zones (by way of creating a designated economic area, or zone, in which tariffs, export duties, and other related taxes are lowered)
- research and development (R&D)
- mergers and/or joint ventures (JVs)
- technology transfers.

Subsidies and tariffs will be discussed in greater detail in Chapter 2.

Earlier in this chapter, the concept of comparative advantage was used to discuss the rationale behind why certain actors enter into international trade. The next section delves deeper into some of the theories regarding international economic growth.

Theory (Heckscher-Ohlin [H-O], Stolper-Samuelson, and Rybczynski) versus Practice (Leontief Paradox)

Several economic theories exist that can be linked, directly or indirectly, with the theory of comparative advantage. Such knowledge may prove helpful for practitioners in terms of understanding client needs, especially transactions related to the international economic system.

Three theories at the big-picture level are highlighted below: the Heckscher-Ohlin (H-O), Stolper-Samuelson, and Rybczynski economic theories. These seminal theories will be compared and contrasted with the Leontief Paradox, which takes a more practical approach.

Heckscher-Ohlin (H-O):²

- A country should export a resource (land, labor, and capital) that exists in abundant supply (or endowments, in the form of land, labor, and capital).
- A country should conversely import a resource that exists in relatively scarce supply (or endowments, in the form of land, labor, and capital).

Stolper-Samuelson:³

- A theory linked to the H-O theory, which argues that relative changes exist between two variables, the factors of producing a particular good (input factors) and the produced good itself.
- That of the relevant input factors, the most intensively used input factor will increase in price, while the price of the other input factor that was less intensively used will fall.
- Thus, if the price of a particular good increases, assuming wages and rents represent input factors, wages (input factor 1) will increase while rents (input factor 2) will decrease.

Rybczynski:⁴

- An increase in the endowment of one input factor will lead to a more than proportional increase in the production of a good that uses such input factor intensely.
- Conversely, a fall will occur in the output of a good that does not use the (new) endowment factor; e.g., with increased immigration into a country, a more than proportional rise in labor-intensive goods may result, with a fall in capital- (non-labor-) intensive goods.

Of course, with most economic theories, there are several underlying assumptions. Specifically, the underlying assumptions of the above theories include:

- perfect competition
- the same price for goods and services
- perfect information
- a two-country, two-product (2x2) hypothetical world linked to international trade.

As common sense will dictate, the above underlying assumptions may work in academic ivory towers but do not necessarily hold true in all circumstances in the real world. For instance, competition is not always perfect, and it is also questionable whether all economic actors possess perfect information. Notwithstanding such potential weaknesses, market practice in

the international economic system is often predicated upon such economic theories, which are then adjusted to meet the specific real-world demands clients face.

Although economic theory involving international trade can appear elegant, an attempt was made to stress-test the H-O theory in particular. The findings resulted in the following economic paradox, referred to as the Leontief Paradox:

Leontief Paradox:

- A country that is relatively capital intensive should possess a comparative advantage in capital-intensive goods, and thus, according to David Ricardo's theory of comparative advantage, such country should export capital-intensive goods (relative to labor-intensive goods) to other countries when engaging in international trade.
- Contrary to such theory, according to an empiric study by Professor Wassily Leontief, a country that has the highest capital-to-labor ratio (i.e., a relatively capital-intensive country, such as the United States) tends to export a lower capital-to-labor ratio in its exports relative to its imports (thus possibly discrediting the H-O theory, at least to a certain degree).

The apparent disconnect between international economic theory and practice suggests that although economic theory can appear elegant in explaining complex economic ideas, such theory, due in part to theoretical working assumptions that can often oversimplify and/or ignore real world complexities, can and should be tempered by evidence from real-world outcomes as seen in the international economic system.

The next section discusses the factors behind and implications of globalization, which, depending on one's view, is either the chicken or egg of international trade. But notwithstanding which side of the coin one takes, few will dispute the notion that globalization and international trade are inextricably linked. Naturally, this issue is of immeasurable importance for practitioners and clients, given the extraordinary changes occurring within the international economic system in the current globalization era.

Globalization (Contents versus Discontents):

Technology, Deregulation, and Institutionalization

Globalization arguably has been occurring since early civilizations began to trade with one another. Although academics argue tirelessly over semantics, legal practitioners can think of globalization as a term denoting the convergence of products, services, people, and cultures (defined broadly) that renders borders increasingly more opaque and transparent.

One main driver behind globalization is technology. In particular, the advent of the personal computer, Internet, and e-mail have allowed for near-instant interconnectivity and communication across borders. More recently, the launching of powerful search engines (such as Google and Bing) in addition to text messaging, Skype-type, Voice Over Internet Protocol (VOIP) phone services, and various social networking sites (SNS) (such as Facebook and Twitter) have made such connections even more widespread. Such game-changing technological advances have made the U.S. economic system instantly part of the greater international economic system.

Deregulation and liberalization at the domestic and international level have also played a notable role in furthering globalization across borders. The fewer the regulations that exist, the more discretion that domestic (and international) economic actors have in terms of deciding whether and to what degree to trade with other economic actors (separate but often related to decisions regarding products and services to be rendered across borders). Thus, the thinking is that, with deregulation, more incentive (or less disincentive) exists for economic actors to explore international trade opportunities for the betterment of their respective institutions.

Institutionalization

Institutionalization is another important factor that contributed to globalization, and thus the furthering of international economic transactions and wealth. In sync with the role of technological innovation came the rise of “institutional investors” (i.e., large institutions with relatively large pools of cash and capital for investment, such as corporations, insurance companies, financial institutions, and related parties, discussed in greater detail in later sections of this book) in the international economic system. With

larger institutions linking into the international economic system came increased volumes, velocity, and sophistication of goods, products, and services across the globe. Thus, linking this section with the earlier section discussing producers (and supply curves), companies and other large institutional investors can play the role of either an investor or producer, or both, within the international economic system.

With greater competition and deregulation, institutions (as market actors) began to seek maximum returns on investment both domestically and internationally to reach optimal output to maximize value. After all, by seeking onshore opportunities only, institutions were needlessly limiting themselves, and as a result, their profits. Thus, the push toward offshore investments, clients, products, and services became a dominant strategy for clients.

As mentioned, institutions, by virtue of their scale and scope, also are relatively more sophisticated than retail investors. This is because institutions generally have more capital with which to hire and acquire the needed workforce and knowledge to enter into increasingly complicated and sophisticated transactions. Further, in the case of investing in derivatives (a type of complex financial instrument, described later in this book), it is much easier for institutional investors, rather than retail (or regular, everyday individual) investors, to enter into such sophisticated product class.

Although there are several types of institutions relevant to the international economic system—corporations, insurance companies, and pensions, to name a few—financial institutions have played an increasingly greater role in the international economic system, both good (in terms of capital-raising options) and not so good (as seen in the 2008 subprime financial crisis).

To provide a better sense of the size and scope of some of the largest financial institutions, Table 1.2 shows the largest U.S.-based institutional players (as of the time of this writing) in the form of financial institutions.

World's Largest Banks by Market Capitalization 2011

The following list shows the largest banks in the world ranked by market capitalization, as of August 23, 2011. China currently has the two largest banks in the world, measured by market capitalization. In 2005, it did not have a single bank among the world's top 50. Now it has four of the top ten.

Table 1.2: World's Largest Banks by Market Capitalization 2011
(continued)

Rank	Bank	Country	Market cap (\$b, 8/2011)
1	Industrial & Commercial Bank of China	China	223.4
2	China Construction Bank	China	167.1
3	HSBC Holdings	UK	150.06
4	Agricultural Bank of China	China	134.91
5	JPMorgan Chase & Co.	US	130.27
6	Bank of China	China	122.16
7	Wells Fargo	US	120.86
8	Citigroup	US	76.04
9	Commonwealth Bank of Australia	Australia	75.24
10	Banco Santander	Spain	74.81
11	Itau Unibanco	Brazil	70.44
12	Royal Bank Canada	Canada	70.38
13	Bank of America	US	65.23
14	Mitsubishi UFJ Financial	Japan	63.92
15	Toronto-Dominion Bank	Canada	63.50
16	Westpac Banking	Australia	61.69
17	Sberbank of Russia	Russia	61.12
18	Bradesco	Brazil	57.76
19	BNP Paribas	France	57.06
20	Bank of Nova Scotia	Canada	53.85
21	ANZ Banking	Australia	52.76
22	Standard Chartered	UK	52.16
23	UBS	Switzerland	51.39
24	National Australia Bank	Australia	50.83
25	Banco do Brasil	Brazil	44.85
26	Bank of Communications	China	43.91

(Continued)

Table 1.2: World's Largest Banks by Market Capitalization 2011
(continued)

Rank	Bank	Country	Market cap (\$b, 8/2011)
27	BBVA	Spain	41.84
28	Sumitomo Mitsui Financial	Japan	40.20
29	China Merchants Bank	China	39.64
30	US Bancorp	US	39.01
31	Bank of Montreal	Canada	36.92
32	Deutsche Bank	Germany	36.07
33	Santander Brasil	Brazil	34.77
34	Nordea Bank	Sweden	34.29
35	Lloyds Banking Group	UK	31.92

Source: <http://www.relbanks.com/worlds-top-banks/market-capitalization-2011>

Case Study: The Dutch Disease

If a country suddenly discovers a new, highly sought-after natural resource (like oil or gold), it would generally be viewed as a cause for celebration. But should it?

Under the theory of comparative advantage, a country should specialize in production of a product (or service) in which it has a comparative advantage for gains in trade within the international economic system. Suppose that a country recently discovered that it has huge gas reserves, which it could sell to various economic actors (both institutional and retail investors). Per the economic theory of comparative advantage, that country should specialize in the production (extraction and refining) of its gas fields. Doing so would mean greater overall economic gain by trading its gas (in which it has a comparative advantage) in exchange for other goods (for example, a staple commodity such as wheat or rice).

However, per an economic situation known as the Dutch disease, a potential exists for a potential *decrease* in overall economic gains, even if a country pursues its comparative advantage, in the unique circumstances described above—when a surge in demand (a boom) suddenly exists for a particular good that, in turn, draws resources away from the country's manufacturing industry (in which the country had an advan-

tage prior to the discovery of a new good). As a result, the country would shift its resources away from manufacturing to explore its newfound gas reserves. Thus, because the country is no longer specializing in manufacturing, it loses its comparative (and possibly absolute) advantage in the manufacturing sector.

In the short to medium term, a sudden increase in the country's gas supply would draw greater investment into the country's gas reserves. This, in turn, increases the demand for the country's domestic currency because transactions for gas typically will occur in the domestic country's national currency.

Because manufacturers often depend on the exportation of their goods for profit, such increase in the nation's domestic currency makes the manufacturer's exports look relatively more expensive. This is because an increase in the exporting country's currency generally makes it a stronger currency (with greater purchasing power parity [PPP] relative to other currencies). A strong domestic currency therefore helps importers since a stronger domestic currency with a higher PPP means imported goods are relatively cheaper. But, on the downside, a stronger domestic currency makes exports look more expensive (as explained in Chapter 13).

Suppose also that, in the medium to long term, a sudden drop in demand (a bust) occurs in gas. Maybe this is due to a new technological shift in which gas is needed less or, even more simply, that the gas supply runs out. Suddenly, there is a rush (panic) for the country to get out of the gas industry and shift back toward its manufacturing industry.

However, returning to competitiveness in the country's area of former comparative (and possibly absolute) advantage—in this case, its manufacturing industry—often takes longer than the time it took for the country's gas supply to fall. This therefore leaves the country in an economic situation in which the country is worse off for pursuing its comparative advantage (e.g., gas reserves), which represents an exception to the general economic rule that a country should pursue the product or service in which it has a comparative advantage.

The scenario described above is exactly what happened in the Netherlands in the 1960s, when the country discovered vast amounts of gas deposits in an area in the North Sea. As overseas investors began to buy the gas deposits, the Dutch guilder (then the country's domestic currency)

increased, making non-gas export products relatively more expensive, and thus less competitive.

Ever since, the term “Dutch disease” refers to a correlation within the field of international economics between an increase in demand for a particular domestic good and the decrease in the country’s manufacturing sector in which the domestic good exists. Often, it is associated with a discovery of a particular natural resource, but it can also be linked to an increase in foreign aid, foreign currency, or another related event.

With clients engaged in a transaction involving a sudden surge in a particular product (including commodities-related transactions such as oil and precious metals), noting an awareness of the possible economic risks taken from economic history—as well as the product’s interplay with the foreign exchange (FX) markets—can demonstrate to clients your acute knowledge and awareness of fundamental economic principles that in this type of fact pattern may harm the client’s economic (as well as legal) interests.

Summary

- Supply and demand intersect to determine prices within the international economic system. If prices go up, demand decreases, while supply increases (representing a movement along the curve upwards on the demand curve, indicating that less quantity will be consumed), rather than a shift, since a price-related event has occurred. Both the supply and demand curve can also shift outwards based on certain factors, such as technological shifts for the supply curve, and changes in income, population, and prices of related goods for the demand curve.
- The concept of comparative advantage, as put forth by David Ricardo, underlies the basic tenets of why countries trade with each other, even if one country has an absolute advantage in the products that it is trading.

The concept of reaching optimal efficiency is represented by the production possibility frontier (PPF) curve, while the concept of purchasing power parity (PPP) is one measure to determine the relative value and strength of a particular currency in other offshore jurisdictions.