A Concise History of Globalization from 1500 to Present: *Social and Environmental Concerns*

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The development of globalization has proven to be an exceedingly contentious topic, rife with differences in ideology and conflicting philosophies of human nature, economic structures, and the role of government in the lives of its citizenry. As globalization is a cumulative process, any analysis must be placed in a historical context that delineates the political philosophies that form its constituent ideological parts. The very controversy that swirls about the dialogue frequently comprises of didacticism and monochromatic moral philosophies – as if there is only absolute wrong or absolute right. Furthermore, this bipolar framework is further split into a worldview that is “absolute evil” and “absolute good” in a dialectical framework as Adam Smith’s free-trade liberalism was a direct foil to mercantilist interventionism, various political philosophies must be compared and contrasted.

Beginning with the rise and fall of the Spanish and Portuguese Empires, the paper will focus on the development of primarily Dutch, English, and American political, social, and economic dominance. An analysis will be posited to hypothesize why certain countries ceased to be hegemonies or floundered as their power waned. This will include a discussion of economic policy, both domestic and foreign, secularist or religious leanings, scientific or technological innovations, and financial philosophies for each country in question. In some cases the unfolding of events was unavoidable, as if the regime in question was entering a natural obsolescence, and in some cases instances of reckless hubris or dogmatic tunnel-vision crippled the policy makers and precipitated their demises.

The first significant development occurred in the 16th century, when the world underwent an epoch of unparalleled economic expansion. Dubbed “The Commercial Revolution”, it heralded the genesis of an early international market economy. It marked the beginning of a gradual but steady shift of economic leadership from the Mediterranean, beginning with Venice and central Italy and followed by the Iberian Peninsula, to Northern Europe in the Netherlands and eventually England. This development was spurred by an underlying economic philosophy known as *mercantilism*, which held that the prosperity of a nation depends upon its supply of capital, represented by state-owned bullion reserves of gold or silver. These economic assets are best increased through a positive balance of trade, where exports are greater than imports, with other nations. Mercantilism suggests that the ruling government should advance these goals by playing a protectionist role in the economy, by encouraging exports and discouraging imports, especially through the use of tariffs and monopoly charters.[1]As nations adopted this attitude and devoted considerable capital and manpower to secure resources overseas, they became increasingly affluent and successful. In several cases, though, the success was short lived and was quickly eclipsed or precipitated by another nation, as in the shift of power from Spain and Portugal to the Dutch Empire.

There were several factors that spurred this revolution, including but not limited to the introduction of new technologies like the printing press. This made possible the wide scale production and dissemination of manuals about deposit banking, bills of exchange, and double-entry bookkeeping.[2] Maritime transportation improved as well, with significant developments in ship design that ensured higher payloads with smaller crews, new navigational tools such as the astrolabe and marine chronometer, and the improvement of nautical gunnery. It was particularly the latter development that ensured the total domination of the first Portuguese ships over Chinese and Arab navies in the Indian Ocean at the beginning of the 16th century.[3]

Portugal was the first nation that attempted to secure an alternate route to the Far East rather than the costly Silk Road through the central Asian steppes and Asia Minor. Sending ships down the west coast of Africa, Portuguese agents and explorers set up forts and camps that diverted Saharan trade caravans, making the Levant a more expensive and less competitive route. They eventually reached the Cape of Good Hope, but not before they established an extensive slave trade to remedy their paucity of laborers. This slave labor was extensively used in sugar cane plantations like those that dotted the Brazilian countryside and made this colony especially lucrative.[4] However, in 1493 Pope Alexander VI issued the *Inter Caetera* that diverted Portuguese efforts from the Americas and rerouted them to Asia, while declaring that Spain would focus on the New World.[5]

This was the first sign of problems that lay ahead and a habitual acquiescence to the Vatican on the part of the powers in the Iberian Peninsula. A mercantilist and free market economic system should be devoid of religious interference and make decisions that are optimal for commerce. Spain and Portugal would make more mistakes like these, deprioritizing their manufacturing and production sectors while championing causes or ideologies that had little or nothing to do with maximizing the efficiency of their economy. *Inter Caetera* was the first of three bulls, or papal decrees, which would eventually govern Iberian foreign policy in the 16th century.

When Portugal came under the rule of the Spanish crown in 1580, King Phillip II was already making exorbitant interest payments to counter the awesome debt his wasteful empire had wracked up. Prior to discovering gold and silver in Peru and Mexico in the mid 16th century, Spain had small outlines in wool, textiles, iron and steel industries, and a minor bourgeoisie.[6] Castile, later to be the trading capital of the world for gold and silver bullion, was still operating as a late medieval economic system. Beginning in 1541, the massive importation of those valuable ores, a total of 16,900 tons of silver and 181 tons of gold, made the Iberian Peninsula wealthier than the empires of India, Ottoman Turkey, and China. The overall bullion mined in the New World increased the money stock of Europe by 50%, and silver from Spain became the most widespread specie used in Europe and the Orient.[7]

Spain squandered this fortune to engage in expensive military campaigns in Morocco, Italy, and Holland and to underwrite the costly Catholic Reformation.[8] This was symptomatic of their prioritizing religious campaigning and ideologues, such as the ill-conceived Spanish Armada, over structuring their commercial and economic policy to ensure long-term security. Most significantly, though, was their insistence on importing so many of their manufactured goods. Economist Douglas A. Irwin contends that strategic trade policy holds that “gains from international trade arose solely from exporting, and the most favorable balance of trade was where exports at least equaled imports plus specie”.[9] Furthermore, contemporary predictive research models indicate that government export subsidy enables a domestic firm to commit to a higher level of output while forcing the foreign firm to contract and unwillingly transfer its profits to the domestic firm.[10] When a country starts to import too many of its manufactured goods, a major disservice is done to the economic potential of the country in question.

Spain let its manufacturing sector atrophy and left its agricultural potential fallow, while the influx of wealth created inflation and rendered Spanish market prices noncompetitive. A prevailing philosophy at the time, a sect of mercantilism supported by “bullionists”, was that a country should build large reserves to stabilize its markets and buy most supplies needed for the country to operate.[11] Though the former parameter is sensible, the latter indicates a mismanagement of liquid capital that eventually flows out to the countries that produce these very supplies. Effectively, because Spain was spending so much bullion for import, the English, Dutch, French, and German nations were reaping massive benefits as they had both highly diversified economies and large caches of recently acquired liquid capital.

Eventually simple mismanagement evolved in to outright hubris, as Spain actually celebrated their ability to buy whatever they needed and denounced the importance of a manufacturing sector. In 1675, already in the twilight of the empire, one cocky patriot even claimed that Spain’s insistence on importing only, “proves is that all nations train journeymen for Madrid and that Madrid is the queen of Parliaments, for all the world serves her and she serves nobody.”[12] Feckless arrogance is a surefire sign of national instability, and this was certainly no exception.

For the Spanish crown to remedy this imbalance of imports versus exports, a kind of proto-interventionist model of economic governance would be required. This model, based on the nebulous mercantilist philosophy, had already become quite popular in the 16th century as state promotion of overseas trade for power and profit guided commerce in several Western European countries. For example, complementing the standard tariff and subsidy instruments of commercial policy, the Dutch also used the monopoly charter to stoke economic competitiveness, resourcefulness, and profit maximization.[13] This meant that the Netherlands would have to secure resources overseas and begin a massive expansion. First they had to toss the yoke of the Spanish crown, and incited a revolt in 1568. From 1585 on, a mad race for holdings, coupled with outright naval hostilities, began between the Iberian powers and the Low Countries.[14]

The Dutch began to corner the pepper, ivory, and gold trades at the turn of the century by sending 20-25 ships annually to West Africa. This also precipitated an entrance in to the burgeoning slave trade in the area, and the Flemish traders gladly began to traffic in human souls for labor.[15] In an unrestrained free market economy, business is business and anything, even another human being, may constitute a commodity or bankable product. In accordance with the interventionist mercantile philosophy the Dutch government was adopting at the time, the United Dutch East India Company, with an initial capitalization of 7 million florins, was granted a monopoly charter to trade with the Far East. This charter meant that interlopers, even if they were Dutch, could be punished by law. Throughout the 17th century this organization became the pre-eminent global commercial power, and until 1648 was the right arm in the protracted battle against the Iberian Powers.[16] Trade ships in the company, equipped with state-of-the-art artillery and known as Dutch East Indianmen, waged a near constant war (with a brief respite in the years 1608-1620) against Spanish and Portuguese galleons. It initially totally eclipsed the British equivalent, and even far surpassed the revenues of its sister company, the Dutch West India Company, formed in 1621.[17]

With this development, the Netherlands gained tremendous military and commercial power, precipitating the waning of the Spanish Empire. Commerce and banking shifted to Amsterdam, which became the equivalent of contemporary Wall Street in 17th century world business. The new empire's power steadily increased until it finally broke the back of the Iberian Powers by consistently occupying both the Malacca Straits and South American strategic ports, thereby disrupting trade routes in both the major theatres for Spanish and Portuguese commerce.[18] Though these nations were already on the downswing, largely because of poor financial planning, an unwillingness to diversify their economy, unapologetic hubris to menial labor and rival nations, and an allowance of religious doctrine to govern policy, they were decisively defeated in two major naval battles. In both the Atlantic and Indian Oceans, smaller and more nimble Dutch forces annihilated two separate Iberian armadas that totaled 153 ships and 36,000 men.[19]

Throughout this bitter battle between the Low Countries and the Iberian Peninsula, an Anglo-Dutch rivalry was seething beneath the surface. The Dutch had capitulated on their newfound wealth, making commerce and productivity a top priority and not allowing separate ideologies to dictate economic policy. They maintained a secular economic philosophy and even adopted the strategy of lowering the quality of manufactured goods to ensure a higher volume of production. Unfortunately, their reign was not permanent, though it hardly suffered the total collapse Spain and Portugal had a century earlier.

Dutch industry was of two types: "independent industries" like the textiles based in Leiden which were already declining by 1700, and the "finishing industries", or *trafieken*, which were dependent on the staple market.[20] These included tobacco cutting, tanning, dyeing, sugar boiling, cotton printing, and bleaching in a relatively stable supply and demand position; and malting, brewing, and distilling that would fluctuate more as they were dependent on the international grain trade. Despite this, Holland lost her position as intermediary in the complex trade system as other European countries built their own shipping and port facilities. Exports of cloth to Dutch commission agents in Rotterdam and Amsterdam, and transport of German linens bleached at Haarlem, began bypassing Holland and her trading agents by 1750.[21]

Because of an increasingly stifling protectionist policy, there was a high level of wages and a plurality of vested interests from a powerful cadre of free-trading staplers that effectively retarded any significant industrial development. There was also a shift from trade to finance and the country became a center for insurance and credit banking. Speculation and foreign business lending also flourished because of the low interest rates. Rather than a catastrophic fall from grace, as suffered by the Iberian powers, the Dutch just lost their edge and ceased to be competitive on the world market. The English began to pass legislature aimed directly at crippling certain sectors of Dutch manufacturing like the sail cloth industry: The Act of 1736 required every British ship to have at least one set of sails made in the home country. In 1766 the British then unseated the Netherlands in their last commercial haven on the European continent: the Baltic Sea. Some 160 vessels dwarfed the 67 Dutch ships and soon thereafter over 50% of the Russian trade routes belonged to English merchants.[22]

Eventually, the entire world would transition in to *Pax Britannia*, a period of time where the one of the most awesome colonial powers in history would take lessons from both the previous superpowers and fashion an empire that would last centuries instead of decades. The English Islands were specifically well suited for a sudden rise to power come the end of the 17th century. Chief among the factors that ensured success were state policies specifically created to ensure maximum profit, an intersection of government funding and private companies that allowed for the novel development of chartered companies, and military dominance, particularly at sea, that allowed any land gained to be kept against foreign hostilities.

England developed a naval prowess that was far superior to every other European power. Originally named the Navy Royal, but later rechristened the Royal Navy under Cromwell's Commonwealth, a long and storied history of complete dominance began in the late 16th century, culminating in victory at the Battle of Trafalgar during the Napoleonic Wars in 1805.[23] The importance of the Royal Navy's dominance cannot be overstated, as her ships and sailors effectively repelled attacks from competing economic powers before the hostilities even reached England's native soil. As an isolated island, England was last successfully invaded in 1066 during the Norman conquests, making it appear virtually immune.[24] However, even the most impregnable of fortresses have their weaknesses, and it seemed that this tradition of peace on her native soil was threatened in 1588 by an intimidating cadre of Spanish ships looming on the horizon.

The Spanish Armada, as this attempted invasion came to be known, was ordered by King Phillip II of Spain. Although part of the reasoning for the maneuver included slashing English support to the revolting Spanish Netherlands and seriously impeding the development of competing European powers in the New World, it was at least partially motivated by a religious agenda.[25] As such, it remains probably the most indicative of the Spanish crown's insistence to allow religious dogma to rule policy and martial strategy. The English, under Queen Elizabeth I and Admiral Francis Drake, decisively beat back the Spanish advance. The two powers, with auxiliary support to the English from the Dutch, would then remain embroiled in the costly Anglo-Spanish War until peace was brokered in 1604.[26] During this entire period of time, beginning in the 1550's and continuing well in to the mid 17th century, British privateers and smuggling vessels plundered vast amounts of wealth from the Spanish Main in the Atlantic.[27]

This calamitous battle signaled the emergence of a new world order. The early 17th century saw competing Dutch and English charter companies begin a mad rush for land and holdings overseas. In the twilight of Dutch hegemony, England followed its economic rival's example and began to tweak its domestic policies to increasingly focus power and energy on 'pro-business' policies, effectively creating a government that made decisions on the basis of expected profits.[28] This should be seen as distinct from the Spanish power model, that allowed religious conviction to influence policy, and the French model, that propagated a series of ineffective interventionist decisions well into the mid 17th century.[29] England was stoking economic success by allowing entrepreneurship to flourish with relatively little intervention and remained deeply aware of the aspirations of its merchant class. At that time, the granting of royal monopoly charters to joint stock companies was the most efficient way to develop a profitable industry.

The joint stock company was a novel development as opposed to a regular business arrangement which carried great risks and unlimited liability for the investors. In this setup, the liability of a member is limited to the extent of the value of shares held by him. The companies possess large financial resources, professional management determined by democratic votes, large-scale production capabilities, and the possibility for extensive research and development. As such, it was the perfect tool for imperial expansion in the burgeoning days of mercantilism. It is a voluntary association of individuals who generally contribute capital to carry on a particular type of business that is established by law and can only be dissolved by law. A Royal Charter is a charter granted by the Sovereign on the advice of the Privy Council, and at a time a Royal Charter was the only way in which a legitimate incorporated body could be formed.

The chartered company is a prime example of the Crown's willingness to foster commercial success by granting rights of monopoly.[30] Many of the business propositions involved long voyages of exploration and survey, expensive demands for crew and ships, no immediate profits, and the possibility of the need for diplomatic interaction with foreign rulers. Examples of these companies include the Eastland Company, so key in England's shipbuilding industry because of its strong ties to the Baltic region and its wide store of timber. The Muscovy Company was chartered to find a northeast passage to the far Eastern spice markets, which peddled wares that preserved Europeans' food, but proved more successful in the development of an extremely lucrative fur trade with the Russian kingdom. The Levant Company, originally Venetian but later switching hands as a spoil of conquest, was the key intermediary in the complex market for eastern goods in the Mediterranean at the time. [31]

Furthermore, the agricultural sector began to move away from pure subsistence to market production, and an extensive re-organization of property rights allowed land use to be determined by profit opportunities – in this case producing wool for the textile industry. In the 16th century, the country began to diversify its economy and bolster its manufacturing sector. Woolen textiles had been its mainstay export in the preceding centuries, and this industry not only grew in volume but diversity of product as well. Because of urgent military demands, shipbuilding and metalworking increased in importance. It was because of the latter that a cheap and abundant source of energy was discovered.

Coal eventually fueled steam-powered machinery – technologies that in their infancy comprised novelties but would later power the entire economic system. In 1663 and 1680 early prototypes for steam engines were developed for pumping water and pressure cooking, respectively. The latter design included a steam release valve to stabilize the system and prevent explosions. However, in 1712 Thomas Savery and Thomas Newcomen jointly developed a steam engine that used atmospheric pressure to pump water from deep mineshafts. Obviously this greatly aided the extraction of coal from reserves deeper in the earth, presenting an excellent example of a positive feedback response in an economic system: coal allowed for a process to develop that in turn allowed for more coal to be mined.[32]

Eventually engines based on Savery and Newcomen's initial developments, dubbed "vacuum machines", allowed for systems' pistons and cylinders to withstand greater pressures, releasing more energy. The applications were endless. Early disasters occurred, but the introduction of the safety valve in the 1750's to release excess amounts of high pressure steam ensured that the new vacuum machines, known as Cornish engines, would prove safer and more efficient. Eventually steam powered carriages, first named “fardiers” and developed by Nicolas-Joseph Cugnot in 1769, allowed for the first steamboat and the first steam locomotive to be developed in 1802 and 1804, respectively. These high speed modes of transportation ensured that perishable goods could be shipped further distances, and high numbers of laborers could be moved to new areas to further strengthen the ever widening economy of the new British Empire.[33]

Lord Admiral Nelson’s decisive victory against combined French and Spanish forces at the Battle of Trafalgar in 1805 serves as a symbol for Britain’s total dominance, economically and militarily. The combination of technological advances, military dominance, favorable government policy, and a wide enough base of resources domestically and abroad all coalesced so that the English Isles were exporting vast amounts of manufactured goods to the rest of the world. Based on the late 17th century Antwerp-London trade axis, initially developed to traffic woolen textiles from the British Isles to the continental mainland, this new epicenter of business was based almost exclusively in London. The city possessed vast wharves that proved suitable berths for large merchant vessels and vast tracts of warehouses, storage facilities, and factories powered by coal and the engines that engineers from every major European country were developing in unison. As is expected, scientific endeavors progress largely outside of the realm of loyalty to any nation, creed, and are only partially motivated by the pursuit of commercial gain.[34]

Furthermore, complex banking systems and a near glut of specialists in marine insurance and mercantile contractual law, all resulting from the aforementioned London-Antwerp trade axis, sealed the capital city’s position as center of the commercial world.[35] Mechanical power replaced human labor and dwarfed it with its sheer capacity and volume, and energy was culled from inanimate sources like steam, which in turn were secured from the extraction of coal with techniques powered by the inanimate sources. All this contributed to the expansion of demand in the British Industry, resulting in competitive prices, novel business and economic paradigms, and an explosion of growth in urban centers. London grew in population from the 15th to 18th centuries by a factor of five.[36] Transport and insurance activities were similarly stimulated, and the large influx of liquid capital, payment for the large stores of manufactured goods leaving England's shores to the rest of the world, financed industrial and agricultural developments.

The newfound Empire was distinctively different from her formerly powerful predecessors and employed a pragmatic, systematic, and entirely rational approach to fostering her imperial ambitions and commercial success. For one, religious dogma did not inform government policy, with a brief exception during the Cromwell Commonwealth. However, even during this tumultuous period reforms were instated that ensured future military dominance in creating a permanent naval force, renamed the Royal Navy as mentioned before, and the consolidation of parliamentary, royal, and various factional infantry to create a unified land army.[37] Additionally, the English government was far more cautious in her dealings with the merchant class, carefully adjusting policy to allow for a mercantilist framework that ensured maximum profits and production.

However, eventually this system ran its course. Mercantilism was beginning to flounder in obsolescence, and a Scottish economist would sound the death knell for this philosophy to usher in the tenets of free trade. Adam Smith published *Wealth of Nations* in 1776, when there was a strong sentiment for a more unrestrained system of trade in both Britain and America. The central claim of *Wealth of Nations* is that the free market, while appearing chaotic and unrestrained, has an intrinsic structure, what Smith dubbed "the invisible hand," that will produce the right amount and variety of goods. If a product shortage occurs, its price rises, creating a profit margin that is an incentive for others to enter production, eventually alleviating the situation. If too many producers enter the market, the increased competition among manufacturers and increased supply would lower the price of the product to its production cost, the "natural price". Smith vigorously opposed the antediluvian government restrictions such as monopoly charters and tariffs which he thought were hindering industrial expansion and advocated *laissez-faire* business practices. His scholarship signaled the advent of “liberalism”, a philosophy that would prove to be even more important than mercantilism.[38]

In 1846, liberalism scored a major victory with the repeal of the Corn Laws. In force between 1815 and 1846, they were import tariffs designed to support and protect domestic British corn prices against competition from less expensive foreign-grain imports. The tariffs were introduced by the Importation Act of 1815 and repealed by the Importation Act of 1846. These laws are often viewed as a cornerstone of British mercantilism. According to scholar David Cody,

> “They were designed to protect English landholders by encouraging the export and limiting the import of corn when prices fell below a fixed point. They were eventually abolished in the face of militant agitation by the Anti-Corn Law League, formed in Manchester in 1839, which maintained that the laws, which amounted to a subsidy, increased industrial costs. After a lengthy campaign, opponents of the law finally got their way in 1846—a significant triumph which was indicative of the new political power of the English middle class.“[39]

The Conservatives, the stewards of landed interests, and Whigs, representatives of business and industrial interests, squared off over the issue. The Corn Laws were a vestige of British mercantilist policy, and as such greatly benefited the land-owning gentry. However, the newly empowered Whigs, influenced by David Ricardo’s economic theories, staunchly asserted that a decrease in the price of grain would prompt general food prices to fall. Since landlords tended to squander their wealth on luxuries rather than investments, Ricardo believed that the Corn Laws were leading to the economic stagnation of the British economy. Internal conflict in the Conservative party, as evidenced by the riotous arguments between the party’s prime minister Sir Robert Peel and the hot-blooded young upstart Benjamin Disraeli, were happening amidst a developing famine on the island of Ireland. The Whigs landed a clear victory and crippled their opposition party for some decades after the dismantling of the mercantilist policy structure. Ricardo’s philosophy and scholarship were also crucial in initiating the sea change that would spread from England to the rest of the industrialized world.[40]

Ricardo's most famous work is his Principles of Political Economy and Taxation. The text introduced the theory of “comparative advantage,” which claimed that even if a country could produce everything more efficiently than another country, it would reap gains from specializing in what it was best at producing and trading with other nations. He also championed the concept that wages should be left to free competition. Like Adam Smith, Ricardo was also an opponent of protectionism for national economies. He posited that over an extended period of time, prices reflect the cost of production, and referred to this long run price as a “natural price”.[41]

The economic theories in vogue at the time begin to increasingly resemble contemporary business mores. With the increasing integration of world economies, globalization began to slowly emerge. The absence of transport costs and trade barriers led to a convergence in prices of traded goods and an increase in trade volume in the globalization/integration of world commodity markets. It would seem logical to use trade volume to measure the degree of integration of a given economy; however, trade volume can increase for other reasons besides globalization. If the world supply curve shifts outward, trade volume will increase although there are transport costs and barriers to trade. The supply curve can increase due to a growing population, colonization of empty lands, capital accumulation, or technological change. Therefore, the most accurate measure of globalization is price convergence.[42]

The price difference in cotton between Boston and Manchester went down from 13.7% to 0% from 1870 to 1913, and price difference in iron-bar between Philadelphia and London went down from 75% to 25%. Furthermore, Japan switched from an autarky to a free trade system in 1858, reversing several centuries of *sakoku* enacted by the Tokugawa shogunate in the 17th century. Within 15 years, Japanese foreign trade rose from zero to 7% of the GDP. Korea and China followed suite in the 1860’s and instilled free-trade policies as well. Furthermore, international freight rates decreased drastically with the development of railways, steamships, and the Suez Canal. The North freight rate went down by 41% and the British freight rate by 70% between 1840 and 1910. Additionally, there was a 45% decline in the Atlantic economy transport costs until 1913.[43]

The turn of the century also exhibited rapid growth in world trade as the expansion of exports (3.5 % per year) outpaced that of real output (2.7 % per year). The share of exports in world output reached a peak in 1913 that would not be surpassed until 1970. This is partially due to a weakening of protectionist policies, and a falling off of tariffs, but mostly because of plummeting transportation costs. [44] In the 50 years preceding World War I, there was a massive flow of capital from Western Europe to the developing countries of the Americas and Australia. At its peak, the capital outflow reached 9% of the British GDP, with similar percentages in Germany, France, and the Netherlands. These levels of net economic flows were favored by the fact that the world was on the gold standard which favored stable exchange rates and dependable convertibility. Interestingly enough, historian Niall Ferguson points out that "whether one looks at the duties on primary products or those on manufacturers, Britain was the least protectionist of the imperial powers… in 1913 the average tariff rates on imported manufacturers were 13% in Germany, over 20% in France, 44% in the United States, and 84% in Russia. In Britain they were zero."[45] Still, overall the worldwide economy was becoming increasingly deregulated and interventionism as a viable tactic was waning, largely because there was increasing awareness that government intervention frequently led to unforeseen consequences out of their control.

Economist Robert Bradley Jr., in writing contemporary economics literature dealing primarily with "interventionist dynamics", has delineated the basic differences between the impetuses for intervention by denoting a regulation as being either *dormant* or *causal* to market decision-makers. The former does not impact the market, either because the market would act in the manner prescribed by the regulation anyway, or because the regulation does not apply to actual or anticipated conditions. The latter, on the other hand, impacts the decision-making of market participants. There might also be an indirect effect whereby an otherwise non-initiating intervention inspires the political or market decision-makers to increase or reduce interventionism elsewhere. Psychologically, interventionism begets interventionism.[46]

Twentieth-century Austrian economics identified government intervention into the market economy as a process related to though independent of the market itself. Ludwig von Mises is credited with this theory, and his Interventionist Thesis may be summarized thusly:

> "Attempts to violently manipulate the outcomes of [the market] process lead to reactions that the intervener can neither specifically predict nor effectively prevent. Efforts to make the initial intervention work as designed must take the form of ever-wider and more obtrusive interventions, which are in further conflict with the workings of the market mechanism. In the end the interventionists must either extend their activities to the point where the process has been completely sabotaged or they must abandon their quest to control the market."[47]

An interventionist statute or administrative regulation can therefore be *expansionary*, *contractionary*, or both at any point in the cumulative process. Furthermore, a cumulative process can link domestic to international policy. The United States Mandatory Oil Import Program of 1959, which set effective quotas on crude oil and oil product imports, particularly hurt the economy of Venezuela, at the time the leading exporter to the U.S. In response, the slighted South American country led the negotiations that resulted in the formation of the Organization of Petroleum Exporting Countries (OPEC) in 1960. Parochial intervention by the U.S. created a domestic producer cartel that led to the creation of an international oil-state producer cartel.[48] Despite the fact that the global economies of the industrialized nations underwent a period of heavy deregulation, economic intervention under the Keynesian model was employed again. Keynesian economics promotes a mixed economy, where both the state and the private sector play an important role, which differs markedly from laissez-faire economics. In John Maynard Keynes's theory, macroeconomic trends can overwhelm the microeconomic behavior of individuals. When World War I ended in 1918, monetary stability decreased and hyperinflation affected some of the countries of continental Europe, instilling a deep-seeded doubt in the prospects of pure economic liberalism. Multilateralism gave rise to unilateralism, and the Smoot-Hawley Tariff Act imposed an effective tax rate of 60% on more than 3,200 products and materials imported into the US, quadrupling previous tariff rates. Just a year earlier the American stock market had collapsed and the country was plunged in to the Great Depression.[49]

From 1929 to 1932, global trade decreased by 70% in value terms and 25% in real terms. Protectionist and xenophobic trade policies became *de rigeur*, and the regime of the Third Reich instilled *lebensraum* to remedy its already decrepit economy. What had once been an "open economy" deteriorated in to the scattered salvaging of domestic markets, and in 1931 Britain "abandoned free trade and gold standards" for good.[50] Influenced by Keynes' economic philosophy, President Franklin Roosevelt developed the New Deal program to float the U.S. through the 1930's and stabilize the national economy. Following a brief slump at the end of World War II, the United States quickly re-liberalized its economy and rejuvenated the manufacturing sector by focusing heavily on the military-industrial complex. For the next several decades, Americans enjoyed a boom period.[51]

The 1970's, amidst an energy crisis and rising extremist movements in several regions of the world, saw renewed inflation and higher unemployment rates. Renowned economist Milton Friedman emerged as the foil to Keynesian theory, which many policy makers had become disenchanted with. He was best known for reviving interest in the money supply as a determinant of the nominal value of output, and was the leading proponent of the monetarist school of economic thought. He maintained that there is a close and stable link between inflation and the money supply, mainly that the phenomenon of inflation is to be regulated by controlling the amount of money poured into the national economy by the Federal Reserve Bank; he rejected the use of fiscal policy as a tool of demand management; and he held that the government's role in the guidance of the economy should be severely restricted. Friedman also argued for the cessation of government intervention in currency markets, thereby spawning an enormous literature on the subject, as well as promoting the practice of freely floating exchange rates:

> "The argument that private exchange speculation will not produce a sufficient smoothing of exchange fluctuations is sometimes used to justify, not rigid exchange rates, but extensive intervention by individual governments or international agencies in the exchange market to even out minor fluctuations in exchange rates and to counter capital flights… [such] intervention, it should be noted, is in no way necessary for the operation of a flexible exchange rate system…"[52]

Because of the collapse of Soviet Russia and the seeming failure of Keynesian economic theory during the "stagflation" of the 1970's, a newly deregulated system of neo-liberal thought was developed. A flurry of controversy has surrounded the recent developments in the global economy, and as globalization increasingly becomes a reality, there are those who posit its benefits and those who decry its damaging consequences.

However, equally important was the so-called "Information Revolution". The years 1950-1973 saw a period of the most growth ever. According to economist Mark Solomon, in the context of knowledge-based economies, "growth" does not only refer to "material wealth such as capital, natural resources, or manual labor, it also means the intellectual work of the people".[53] Information constitutes the decisive factor for development in the knowledge-based economy. The labor force, with human beings and their intellectual work as the nucleus, plays a significant role in producing values.

Complementing this highly educated labor force are new information technologies that "have created a landscape where movements of services and capital are faster by several orders of magnitude".[54] Just as the laying of the first transatlantic telegraph cable on July 27, 1866 expedited international business transactions, the advent of portable telecommunications and their accompanying satellites, the internet, fiber-optic cables, and a plethora of other communication devices have forever altered the global economic landscape. More information can travel more quickly and efficiently anywhere in the world. Similarly, liquid capital is no longer shuttled around the globe on rickety ships as gold and silver bullion were several centuries ago. In fact, cash does not even have to make an appearance for the majority of business transactions – vast amounts of money can be wired from bank to bank in the matter of minutes.

Because of a decrease in isolationism, there is an increase in economic insecurity for developing nations – as *core* nations become more integrated and outsource more labor to *periphery* nations, "intensified competitive pressures" arise. As Karl Marx and Frederich Engels pointed out with so much prescience a century and a half ago, globalization is a "worldwide system of production and consumption that disregard(s) national and cultural boundaries".[55] Indeed, in our world today it's becoming increasingly difficult to be an island unto one's self. Thomas Friedman has coined the phrase "the flattening of the world" to approximate the effects that the Information Revolution have rendered on our global economy.[56]

He continues to point out that this revolution is immensely influential, and conjectures that it "was the information revolution that began in the early- to mid- 1980's" that helped topple the communist "totalitarian [system that depends] on a monopoly of information and force". He almost sympathizes with Mikhail Gorbachev's reform attempts with *perestroika*, and observes that, "too much information started to slip through the Iron Curtain, thanks to the spread of fax machines, telephones, and other modern tools of communication".[57] Writer John Gray points out that Friedman maybe placing too much emphasis on this revolution over other aspects of communism's downfall, but there is certainly some truth to his original statement. However, with this deluge of information and opportunity, and the gradual disappearance of borders, come complications that have led many to decry the evils of globalization.

For example, the area of Northern Mexico on the U.S. border, or the *frontera norte,* was deeply affected by globalization policies, most specifically NAFTA. Over the past 30 years or so, trans-national corporations (TNC's) have moved hazardous production facilities to sites located in Northern Mexico. Empirical evidence suggests that this is directly related to U.S. pollution abatement costs increasing, a situation that occurred in the mid-1980's following the passage of NEPA Act in 1969, OSHA in 1970, and RCRA in 1976. However, this "industrial flight" may just as well be spurred by exchange rates and comparative resource endowments; tax avoidance; lower labor, energy and transport costs; domestic markets; or overall business investment conditions. In so few words, it is simply cheaper for many TNC's to move business to countries in the periphery. Additionally, in sometimes desperate bids for revenue, second- or third-world countries promote export-oriented industrial policies to attract industry, which both the WTO and the IMF support through policy initiatives.

With the cancellation of the Bracero Program in 1964, Mexico established the Border Industrialization Program (BIP) in 1965.[58] This organization attracted the interests of foreign businesses and spurred the construction of *maquiladora* manufacturing centers. TNC's from the United States, Canada, Taiwan, Japan, South Korea, the major European economic powers, and even Mexico itself established bases of operation in impoverished border towns that were being managed by the BIP. With the 1986 passage of the General Agreement on Tariffs and Trade (GATT), the number of *maquiladoras* increased dramatically. With this came an increase in population, a static or even declining infrastructure, and significantly lowered health standards coupled with sundry environmental problems. As of 2002, life expectancy and infant mortality rates in Northern Mexico are higher than in United States *and* other parts of Mexico. Contrary to sociologist Ulrich Beck's "risk-society" hypothesis, the bulk of the costs or risks associated with the transfer of hazardous production facilities to Mexico are distributed in an uneven fashion, representing a pattern of "risk discrimination".[59]

A 1991 memo by former World Bank Chief Economist Lawrence Summers written to a professional colleague is partially indicative of what many see as inherent flaws and discriminatory tendencies in the system of globalization:

> "Just between you and me, why shouldn't the World Bank be encouraging more migration of the dirty industries to the [periphery countries]? I can think of three reasons:
> (1) The measurement of the costs of health-impairing pollution depends on the foregone earnings from increased morbidity and mortality. From this point of view a given amount of health-impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages.
> (2) The costs of pollution are likely to be non-linear as the initial increments of pollution probably have been very low cost…
> (3) The demand for a clean environment for aesthetic and health reasons is likely to have very high income-elasticity…While production is mobile the consumption of pretty air is a non-tradable."[60]

Such reasoning undervalues the importance of stable ecosystems and sustainable environmental policies and is based on the assumption that human life in the periphery is worth much less than in the core because of wage differentials. However, there are also arguments that suggest neo-liberal economic policy is simply informed by a pragmatic, and even partially utilitarian, system somewhat akin to a *realpolitik*.

Conversely, there is a sizable body of evidence that suggests globalization is an inextricable complement to civil liberties and advanced democratic republics. The fifth annual K.T. Kearney/Foreign Policy Globalization Index shows that economic integration survived the turbulence of the Iraq War, sharp economic downturn, and failed trade talks. The 62 countries profiled constitute 96% of global GDP, and 85% of global population. The Organization for Economic Co-Operation and Development estimated that official development assistance reached a record $69 billion, with the largest increase of 20% coming from the United States. It also differentiates between unstable "petrostates", such as Iran (ranked #62 several years in a row) and

Russia. Furthermore, there is empirical evidence that suggests more globalized countries have lower rates of corruption, as is claimed by the international watchdog Transparency International.[61]

Economic integration also plays an important role in investor confidence – the importance of perception is crucial to attracting foreign capital. In accordance with the continuing information revolution, countries have become acutely self aware of their “image” and sometimes operate as if represented by a PR firm. In some cases they are actually represented by such a firm. Cross-referencing of data from the Globalization Index and the World Bank shows a moderate correlation between high ranking in the Index and large budget expenditures for public education, particularly in developing countries.[62]

An International Monetary Fund report dated March 17, 2003, differentiates between moderate financially integrated (MFI) countries and low financially integrated (LFI) countries, and the average output per capita rose threefold for the MFI's versus the LFI's. Determining causality is always problematic, but the theoretical framework for globalization indicates that the benefits for a country would fall in to one of two categories: direct channels, as in the augmentation of domestic savings, lower cost of capital due to better risk allocation, transfer of technology, and the development of the financial sector; and indirect channels, as in promotion of specialization, inducement for better policies, and the enhancing of capital inflows signaling better economic policies. All of these parameters point to higher economic growth, and if one examines the cases of India and China in the last 20 years, it coincides with the theoretical assumptions. World Bank estimates posit that real income (GDP) grew at an annual average rate of 10% in China and 6% in India during the two decades ending in 2000. Furthermore, China has claimed per-capita income growth averaging 8.2% during the 20 years through 2001, with additional data from 2004 showing year-over-year real increase of 6.8% in rural households and 7.7% in urban households. Both countries are also experiencing a mass exodus from the countryside to the cities, signaling a transition from an agricultural to a more industrialized economy. [63]

Globalization certainly has its detractors, apologists, and supporters. Being that it's so complex, it should come as little surprise that there is good reason for all three – instances where an integrated economy has improved a nation's existence are numerous. However, corporations hardly have a sterling record of responsibility and integrity, and Adam Smith even observed that corporations may suffer from a failure by the business owners to protect the assets of the company, and instead pursue their own profits irresponsibly.[64]

What is undeniable is that globalization is clearly the sum total of its constituent parts: influenced by mercantilism, liberalism, technological innovations, commercial aspirations, and various economic philosophies. Even as a product of dialectic evolution, the development of free-trade was a clear cut rejection of mercantilist interventionism. Furthermore, it took the rise and fall of several empires, each serving as inspiration and warning to those who followed, that hubris and ignorance, greed and arrogance, ingenuity and resilience will not only determine the fate of the status quo in power at the time, but also the fate of every power that's to follow. History is by its very nature the study of causality, and the causes for the phenomenon of globalization are as varied as they are complex, barely pierced in the limited scope of this essay.

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