

# FRIEDRICH LIST AND THE "AMERICAN SYSTEM" OF ECONOMY

*Adapted from Friedrich List: Outlines of American Political Economy in Twelve Letters To Charles J. Ingersoll. Commentary by Michael Liebig.*

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## Captions and Displays

*“The present condition of nations is a consequence of an accumulation of all discoveries, inventions, improvements, perfections and efforts of all generations which have lived before us; they form the capital of mind of living humanity, and each nation is only productive to the degree in which it assimilates these achievements of earlier generations and knows how to enhance them with its own achievements...” --Freidrich List*

*Marquis de Lafayette*

*List met Lafayette in Paris in 1824, where the great general invited List to accompany him on a tour of America, planned for the following year. Lafayette visited the U.S. in the summer of 1825, as the “nation's guest,” in gratitude for the Lafayette's key role in the American Revolution. At the beginning of June 1825 Lafayette met List in Albany.*

*Archiv für Kunst und Geschichte*

*List's drawing of his vision of a railroad train, made in Germany before there were any railroads built.*

*Library of Congress*

*A rail locomotive used by Union forces in the Civil War.*

*List promoted national development of infrastructure and was himself directly involved in building railroads in Pennsylvania: "Without interference of national power there is no security ... no canals and railroads, no national roads. Industry entirely left to itself, would soon fall to ruin, and a nation letting everything alone would commit suicide."*

*John Quincy Adams*

*Adams was a strong proponent of the American System. The first railroad line in the U.S. was opened during his presidency, while the construction of roads and canals was also pushed ahead.*

*Andrew Jackson*

*Jackson's real political positions, were often difficult to make out, but he showed his true colors, when he abolished the Second National Bank of the United States.*

*Alexander Hamilton and the First National Bank of the United States*

*As the nation's first Treasury Secretary, Hamilton established the dirigist Bank of the United States, to finance national economic development through internal improvements, what we call today, infrastructure.*

*Adam Smith*

*Smith's Wealth of Nations was published in 1776, in opposition to the American Revolution, and in defense of British free trade, such as the chattel slavery illustrated here.*

*An advertisement for the sale of African slaves.*

*In his Theory of Moral Sentiments, Smith asserts that man is driven by his baser instincts: "hunger, thirst, the passion that unites the two sexes, the love of pleasure, the dread of pain, prompt us to apply those means for their own sake, and without any considerations of their tendency to those beneficent ends which the great Director of Nature intended to produce by them."*

*Gottfried Wilhelm Leibniz; Christian Huyghens; Denis Papin*

*A Steamboat, on the Delaware River, opposite Philadelphia. One of the "heat-powered machines" Leibniz and his circle promoted more than 100 years earlier.*

*Leibniz actively followed the development of the first heat-machines. Early work in this direction was done by Christian Huyghens (1629-1695) in Holland, who was in personal contact with Leibniz. Denis Papin (1647-1714) developed the first functioning steam engine between 1690 and 1706. Leibniz wrote to Papin: "I am enthused by the good progress of your fire machine, because I think, once it will have reached perfection, it can be very useful. Therefore, it wouldn't matter if it would earn only one third of the expenses." And Papin wrote to Leibniz, that "the new invention will enable one or two men, with the help of heat power, to do more work than several hundred rowers."*

*Franklin Delano Roosevelt*

*John F. Kennedy addresses 35,000 at Rice University on progress in the U.S. space program.*

*A renewed debate on economic policy has erupted in the United States, in which the programs of Franklin Roosevelt and John F. Kennedy--using the power of government to ``promote the general welfare"--are back on the agenda.*

**Felix Rohatyn**

*In November 1991, the New York banker, Felix Rohatyn, stated: ``We have just experienced the end of a decade characterized by the greatest speculation and financial irresponsibility. Financial deregulation, easy money, loose banking oversight, together with the degradation of our system of values have brought about a religion of money and greed ... The financial speculators have turned our country into a casino.''*

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*The following is adapted from Friedrich List; Outlines of American Political Economy in Twelve Letters to Charles J. Ingersoll, Dr. Böttinger Verlags-GmbH, Wiesbaden, 1996. -- Available from Benjamin Franklin Booksellers, Leesburg, VA. Call 1-800-453- 4108.*

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## **Commentary by Michael Liebig**

- [List in America](#)

Friedrich List (1789-1846) set foot on American soil on June 9, 1825. In January 1825, List had been released from the prison of Hohenasperg in the vicinity of Stuttgart. List spent six months in that prison as punishment for having ``slandered" the government institutions of Württemberg. The fact that List was persecuted in the kingdom of Württemberg, in a case of blatant judicial abuse, was due chiefly to the direct and personal initiative of the Austrian Chancellor, Prince Metternich (1773-1859). Ten years later, when List returned to Germany as a Consul of the American Government, Metternich wrote: ``List is known to be one of the most active, most insidious, and most influential revolutionaries," who was sentenced to a ``dishonorable punishment" on account of his ``revolutionary activity." List, according to Metternich, was an ``escaped convict," and Prussia and Austria ought to be equally interested in seeing to it ``that List's plans do not come to fruition."

List's release from prison in January 1825 was, de facto, linked to the annulment of his German citizenship: he was only released on condition that he accept exile in the United States. Following the refusal of French authorities to grant List a residency permit, he and his family left Europe on April 26, 1825.

During a trip to Paris at the beginning of 1824, before his imprisonment, List had made the acquaintance of the Marquis de Lafayette (1757-1834). The meeting was

arranged by List's fatherly friend, the publisher Johann Friedrich Cotta (1764-1832). On that occasion, and also several times subsequently, General Lafayette wrote to List, inviting him to accompany him on a tour of America, planned for the following year, as a way of escaping political persecution in Europe.

When Lafayette visited the United States in the early summer of 1825, he did so as the "nation's guest," which was an expression of gratitude for the important role Lafayette had played at the side of General Washington in the American War of Independence. At the beginning of June 1825 Lafayette met List in Albany.

List was cordially received by the celebrated, 67-year-old general. He traveled with him through the United States for the following three months, during which time, Lafayette introduced List to the leading circles in America. Among others, List met Mathew Carey (1760-1839), Charles Ingersoll (1782-1862), and Henry Clay (1777-1852), who was to have a lasting influence upon American politics as Speaker of the House, U.S. Senator from Kentucky, Secretary of State, and co-founder of the Whig Party, which supported the American System. List also met President John Quincy Adams (1767-1848) and the Andrew Jackson, who would later become President.

Later that year, List bought a farm near Harrisburg, Pennsylvania. His attempt at farming was a failure, however. In the summer of 1826, he moved with his family to Reading, a little town northwest of Philadelphia. List lived there until his departure for Europe in 1832. In Reading, List began writing for the *Readinger Adler* (*Reading Eagle*), a newspaper with extensive influence in Pennsylvania at the time. Founded in 1796, this German-language paper had some 2,500 subscribers by 1826. Most of List's articles for the *Adler* were unsigned, but his journalistic work familiarized List with manifold issues of economic and political life in the United States.

List wrote:

"Here you see rich and powerful states arise out of the wilderness. It was here, that it first became clear to me, how the economy of a people develops step-by-step. A process which required a succession of centuries in Europe, unfolds here in front of our eyes--the transition from a condition of wilderness into animal husbandry, then into a developed agriculture, followed by manufacturing and commerce.

Here you can observe how the landowner's income increases gradually, from nothing at all, to considerable levels. Here, the simple farmer understands the practical means for elevating agriculture and his income, far better than the shrewd scholars in the Old World; he seeks to draw manufacturers and industries into his vicinity.... "

In addition to a certain financial security, the position of editor at the *Adler* also provided List with considerable political influence. The German-speaking residents

of Pennsylvania were a decisive force in elections, not only in that state, but also at the national level. List was aware of that factor, and his columns in the *Adler* from 1826 to 1830 are eloquent testimony to his influence.

To be able to appreciate List's positions on important issues of American politics in the appropriate context, it is useful to recall political developments in the United States at that time. By the 1820s, those who had played leading roles in the Revolution were gone from the political stage. At the same time, the conflict between the predominantly free-trade orientation of the southern states and the northern states of the Union, which were more inclined to the protectionist tradition of the Founding Fathers, escalated.

- [The Election of 1825](#)

In 1825, John Quincy Adams was elected sixth president of the United States. Adams, as Secretary of State, had contributed to the formulation of the Monroe Doctrine of American foreign policy. In that doctrine, the United States declared that the intervention of European powers was considered illegitimate for the entirety of the American hemisphere.

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## Active Government

At the same time, Adams was a strong proponent of the "American System" of economic policy, i.e., he favored a policy of active government promotion of agriculture, industry and science. The first railroad line in the U.S. began operating during his presidency, while the construction of roads and canals was also pushed ahead. Adams also promoted the exploration and surveying of the western territories of North America all the way to the coast of the Pacific Ocean. Adams believed in the primacy of the Federal Government over that of the states.

Adam's election was very controversial, however. Neither Adams, nor any of his opponents: Andrew Jackson, W.H. Crawford or Henry Clay, achieved a majority in the Electoral College. Thus, the House of Representatives decided the election. But the vote in the House did not go to Jackson, who had won the popular vote, but to Adams, who ranked second. Following Adam's election, Jackson founded the party of the "Democratic Republicans," while Adams and Clay formed the party of the "National Republicans," from which the Whig Party emerged in 1828. Adams and Jackson were two completely contrary characters, the first proper and honorable, the second a populist, which earned him the nickname of "Old Hickory."

In the second British-American war of 1812-1814, Jackson had won a number of battles against the British, enhancing his popularity. But he advocated the British-style, free-trade interests of the southern states, although not openly at first. He

opposed the economic policy of the ``American System" and promoted states' rights, against the federal government.

With Jackson's populism, and the sophisticated way in which he coupled his policies to his own personal charisma, his real political positions, especially his economic policies, were often difficult to make out. Jackson even proposed extremely high protective tariffs while campaigning for the presidency in 1828. His pragmatism paid off when he was elected.

Jackson showed his true colors, however, when he ordered the closure of the Second National Bank of the United States. We will elaborate on the importance of the National Bank in greater detail below. Here, suffice it to say, that the National Bank was a cornerstone of the American System, since it allowed the Federal Government to finance its economic policy decisions. On October 1, 1833, Jackson ordered the withdrawal of the deposits of the Federal Government from the National Bank, and the institution ceased to exist.

Jackson also began to lower the protective tariffs, but without running the risk of abolishing the system of tariffs altogether. Jackson's presidency ended in January 1837 amidst a severe financial and economic crisis. Friedrich List also lost his American wealth in this crisis.

We have dealt with the presidency of Andrew Jackson in some detail not only in order to sketch the back-and-forth battle between the Anglophile party of the free-trade faction and the party of the ``American System," but because of the role List played in Jackson's presidency.

Nothing would have been more obvious than for List to have joined the party of Adams, and to have supported his re-election. Adams, after all, was a proponent of the ``American System." But List supported Jackson and even used his editorial influence at the *Adler* to Jackson's benefit. The support of the German immigrants in Pennsylvania was a crucial factor in Jackson's election to the presidency in 1828. These German-Americans tilted the scales in favor of Jackson, since the proportion of votes for Adams in the East and for Jackson in the South were approximately equal.

When List visited Jackson later in the White House, the president expressed his gratitude for the ``staunch support" of the ``German citizens of Pennsylvania." When List became an American citizen in 1830, Jackson's gratitude took the form of promising List a position as Consul in the foreign service of the United States. List did in fact become Consul to Hamburg, Baden and Leipzig -- all unpaid positions. But his effectiveness as Consul was constantly undermined by systematic intrigues on both sides of the Atlantic, up to the point that List left the Consular Service in 1837.

It is difficult, even today, to come to a conclusive evaluation of List's motives for supporting Jackson. Jackson's charismatic personality and his populist policies,



demanding democracy for the simple people, must have impressed List so strongly, that his otherwise sharp political judgment suffered from that impression.

## Railroad Building

Another decisive and important complex in List's American period concerns his activities on behalf of railroad construction. List himself reports: "An enterprise was offered to me, which prevented me from devoting my time to literary pursuits for a long time. Politics and writing in North America are not very lucrative vocations; he who wishes to commit himself to them, but is not naturally wealthy, seeks to secure his existence and his future first of all by means of some enterprise. I, too, found it advisable to follow this maxim and the opportunity to that end was provided by my acquaintance with railroads, which I had already made earlier in England, a fortunate discovery of new coal deposits and a no less fortunate purchase of the land upon which these deposits were located."

List had been very interested in the railroads in America, which were just then beginning to develop, and in the *Adler*, List wrote constantly and approvingly on the most recent news of progress in this area of transportation technology. In 1827, List also began his correspondence with the Bavarian Superior Mining Councilor, Josef Ritter von Baader (1765-1841) in Munich, an important proponent of railroad construction in Germany. Some of List's letters were published in the *Augsburger Allgemeinen Zeitung*. In these letters, List discussed the projects for road, canal and railroad construction in America, in order to demonstrate the advantages of railroad transportation.

The coal deposits, mentioned above, were in Berks County, Pennsylvania. These deposits could be exploited economically, only if cheap and efficient transportation to the larger cities in eastern Pennsylvania could be created. A railroad would have to be built reaching at least as far as the Little Schuylkill River.

From December 1828 onward, List devoted his energies primarily to the Little Schuylkill Navigation, Railroad and Canal Company, where he took an active part in the management. List planned to extend the short Little Schuylkill line initially to Reading, and thence to Philadelphia. In List's design for the project, these railroad lines were to be part of a comprehensive north American railroad system. In 1829 List's time was taken up with the difficult negotiations on financing, which were concluded in November of that year; construction then began on the railroad; it opened at the end of 1831.

List's experience with the Little Schuylkill line was to be of immense importance for his later work in Germany. In the Foreword to his National System of Political Economy," List writes:

"I previously knew the importance of means of transportation only from the

standpoint taught by the theory of values; I had only observed the effect of transport businesses in particular instances and only with respect to the expansion of the market and the reduction of prices for material goods. Only now did I begin to consider it from the point of view of the theory of productive forces and in its total effect as a national transportation system, consequently, according to its influence upon the entire mental and political life, social intercourse, the productivity and the power of nations. Only now did I recognize the reciprocal relationship which exists between manufacturing power and the national system of transportation, and that the one can never develop to its fullest without the other.

“Thus was I able to study this material -- this I dare to claim -- more comprehensively than any other economist before me had done, and to cast a clear light upon the necessity and the utility of entire national systems of railroads, and I did this before any economist in England, France, or North America had thought of considering these matters from this higher standpoint.”

On November 8, 1830, List was nominated to the position of American Consul in Hamburg. He traveled to France and Germany. When the Senate of the city of Hamburg refused to accredit him, and when he also was not confirmed by the Congress in Washington, he returned to the U.S. in October 1831. In July 1832 List was nominated Consul to Baden, whereupon he left the United States with his family.

List wrote about his desire to return to Germany:

“The relationship I have to my fatherland is like that of mothers with crippled children: they love them all the more, the more crippled they are. Germany is the background of all my plans, the return to Germany.”

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## **Battle for the American System**

When List arrived in America, a battle over economic policy was raging, in which, to simplify somewhat, the issue was the following: Were the United States to be primarily an exporter of raw materials and agricultural products (cotton, tobacco, grain) on the world market dominated by England, or would the country have an economic policy based upon the development of its own internal market, which would combine the development of agriculture with the priority of development of industry and infrastructure? The former point of view marched under the flag of “Free Trade,” while the second embodied a commitment to the American System of development of national “productive forces.”

When List employs the term “American political economy,” he is pointing to economic policy in the broader sense. The United States emerged as an



independent republic, primarily because the Founding Fathers around Benjamin Franklin (1706-1790) and George Washington (1732-1799) were determined no longer to accept the dictates of British colonial power, which compelled the thirteen colonies in North America to export raw materials exclusively, and to import finished goods only from England. London's prohibition, enforced with military might, against the founding of larger craft-businesses and manufactures, so that the colonies could provide for their own finished products, and the attempt to enforce the import of British finished products by the colonies, was the central issue leading to the Declaration of Independence and the American Revolution.

It is not generally known, that Adam Smith (1723-1790) launched a direct polemic against American independence, in his *Wealth of Nations*. In a threatening tone, he warned the American colonies to drop their designs for creating an independent economic base, above and beyond agriculture. This, Smith's main work, was published in 1776, thus simultaneous with the beginning of the War of Independence.

Smith wrote:

``It has been the principal cause of the rapid progress of our American colonies towards wealth and greatness, that almost their whole capitals have hitherto been employed in agriculture. They have no manufactures, those household and coarser manufactures excepted, which necessarily accompany the progress of agriculture, and which are the work of the women and children in every private family. The greater part, both of the exportation and coastal trade of America, is carried on by the capital of merchants who reside in Great Britain. Even the stores and warehouses from which goods are retailed in some provinces, particularly in Virginia and Maryland, belong, many of them, to merchants who reside in the mother country, and afford one of the few instances of the retail trade of a society being carried on by the capital of those who are not resident members in it. Were the Americans, either by combination or by any other sort of violence, to stop the importation of European manufactures, and, by thus giving a monopoly to such of their own countrymen as could manufacture the like goods, divert any considerable part of their capital into this employment, they would retard instead of accelerating the further increase in the value of their annual produce, and would obstruct instead of promote the progress of their country towards real wealth and greatness. This would be still more the case, were they to attempt, in the same manner, to monopolize to themselves their whole exportation trade."

Thus, the original economic policy motivations of the American War of Independence were once again on the agenda, albeit in somewhat altered form, during List's stay in the United States. Once again, it was not a matter of economic policy issues in general, but of issues of ``political economy", which immediately

impinged upon the political existence of the United States. The predominant political faction in the southern states wanted Free Trade, i.e., agricultural exports to Great Britain and unbridled imports of cheap English finished products into the U.S. In the North as well, however, especially in New York and Boston, there were politically influential, commercial and financial interests, who also supported Free Trade. Albert Gallatin, Treasury Secretary under Presidents Thomas Jefferson (1743-1826) and James Madison (1751-1836), represented this tendency.

The proponents of the "American System" wanted state-promoted economic development of the domestic market by means of the combined growth of agriculture, industry and infrastructure and they wanted to secure this domestic development with protective tariffs, which were naturally directed primarily against Great Britain.

A half-century following the Declaration of Independence, the outcome of this battle between the anglophile free-traders, and the representatives of the American System, was to decide whether the Union would continue to grow as a nation and an economy, or whether it would become weaker and weaker until it ultimately broke apart. The issue was ultimately whether Great Britain would be able to regain control over its erstwhile colonies by means of its trade policy, which it had failed to accomplish twice, in 1776-1783 and again in 1812-1814, with military means.

This political reality is reflected in the *Outlines* most clearly. As List explicitly and repeatedly emphasizes in these letters, there is an immediate connection between domestic and foreign policy, on the one hand, and the level of development of the national productive forces on the other hand. The growth of the productive forces signifies, simultaneously, the growth of national security domestically, and abroad. List refers to the War of Independence repeatedly in the *Outlines*, and also to the British-American war of 1812-14. He speaks of the free traders, sarcastically, as those who want to buy their weapons "cheaply" from the enemy when it comes to war.

In the 1820s, Thomas Cooper, Professor of political economy at South Carolina College, authored a propaganda piece in favor of the free trade and slavery as the foundation of the cotton-export economy of the southern states. A speech which Cooper delivered on July 2, 1827, exemplifies how closely the issues of free trade and slave-economy were connected to the issue of the national existence of the United States:

"I have said, that we shall 'ere long be compelled to calculate the value of our union; and to enquire of what use to us is this most unique alliance? By which the South has always been the loser, and the North always the gainer. Is it worth our while to continue this union of states, when the North demands to be our masters and we are required to be their tributaries? The question, however, is fast approaching to the alternative of submission or

separation."

Although it would be 34 years before the party of free trade and slavery in the southern states broke openly with the Union and instigated the Civil War, Cooper's words indicate, that the danger of that secession was already looming during List's stay in the United States.

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## Friedrich List and Adam Smith

The core of the *Outlines* is their biting polemic against Adam Smith. For List, Smith is the "spiritual rector" of the ideology of Free Trade and opposition to state guidance in the national economy. List emphasizes, time and again, that there is a profound contradiction between Smith's postulates, such as his representation of how the allegedly exemplary and superior British economic system functions, and the reality of the British economy. The British System of Adam Smith, as List shows, is only suited to exports aimed at preventing other, still underdeveloped economies from developing and expanding their own productive forces. The development of the maritime fleet ("Navigation Act" of 1651), the development of the textile industry, and other branches of exports, England owed to the targeted intervention of the government, which certainly did not rely upon a policy of Free Trade for the growth of Britain's domestic economy. British manufacturing, as List showed, was always and strictly protected by the British government against foreign competition. To the purpose of obtaining and securing its hegemonic position in world trade, England always employed political and even military power without flinching. Americans had to understand -- as List said of Smith in a speech on November 3, 1827, in Philadelphia -- that "his system, considered as a whole, is so confused and distracted, as if the principal aim of his books were not to enlighten nations, but to confuse them for the benefit of his own country."

As List himself writes, he had developed a clear position against Adam Smith and "his stubborn admirers," particularly in Germany, even before he settled in the U.S.

List wrote:

"However this teacher of national economy [Smith] is esteemed in other respects, all of his merits can not compensate for the immeasurable damage which the fable of so-called free trade, which he has implanted in the ears of our theoreticians, has caused. Smith's basic error consists in the fact, that he ascribes a productive power to capital, although only labor produces, with the assistance of a greater or lesser capital. I have, indeed, fought against this theory in earlier essays, written for the Association of Commerce, but the subject deserves a more thorough treatment, one based upon the words of the

founder of this school."

In the fourth letter of the *Outlines*, List emphasizes that he would present only a "short exposition" and not a "scientific development" of the fundamental conceptual errors in Adam Smith's theory. List did provide a thorough refutation of Smith in his later works. In the *Outlines*, List nevertheless strikes at the core of Smith's theory when he writes, "that Smith and the Frenchman, Say [Jean Baptiste Say, 1767-1832, French political economist], "entirely misapprehended the aim of political economy. This object is not to gain matter, in exchanging matter for matter, as it is... in the trade of a merchant." Smith and Say "treat, therefore, principally of the effects of the exchange of matter, instead of treating of productive power."

Smith's negation of productive forces leads to his ignoring "the causes of its rise and fall in a nation." Smith therefore also pays no attention to "the true effect of the different component parts of productive power." Without any differentiation, Smith calls the "existing stock of matter" by the "general name of capital," and to this he attributes a downright "omnipotent effect." Smith refuses to consider, that "the productiveness of this capital depends upon the means afforded by nature, and upon the intellectual and social conditions of a nation."

Thus, according to List, "the productive powers of a nation" are based upon a "capital of nature," a "capital of mind" and a "capital of productive matter." The greater part of the productive power consists in the intellectual and social conditions of the individuals, which I call capital of mind." Among these, List numbers "industry, instruction, enterprising spirit, perseverance, armies, naval power, government." If these conditions are met, then "it is reasonably to be expected that it [the nation] can acquire the necessary skill to complete in a short time its productive power by these manufactories" and also to achieve the "political power" to protect its productive forces.

A surplus of "capital of nature," people, and mental capital, as well as material capital, were already available in the United States. No other country in the world had such favorable conditions.

The conception of "mental capital" as the key conception of his theory of productive forces, and this theory itself, is dealt with more broadly in List's *Natural System* and in the *National System*. The first sketch of this theory in the *Outlines* becomes clearer, however, in light of the following quotes from the *Natural System*. It becomes apparent that List's notion of "mental capital" describes scientific-technological progress as the basis for economic development. Science, applied to the thus continuously improved instrumental forces of production, is productive power.

"The present condition of nations is a consequence of an accumulation of all discoveries, inventions, improvements, perfections and efforts of all

generations which have lived before us; they form the capital of mind of living humanity, and each nation is only productive to the degree in which it assimilates these achievements of earlier generations and knows how to enhance them with its own achievements..."

"The more a person learns how to use the forces of nature for his own purposes, by means of perfecting the sciences and the invention and improvement of machines, the more he will produce."

"If, however, the nation guarantees and secures the establishment and continuous development of manufacturing forces by means of a good system of tariffs, then not only does the first, the greatest, and the most useful division of labor emerge in the nation, that between agriculture and industry, but it assures a progressive growth also for the future of these two branches of activity, since by means of their activity, they will elevate each other mutually, and provide each the most secure guarantee against any backwards movement."

"The concentration and reciprocal effect of industry and agriculture conjoin in a growth of productive powers, which increases more in geometrical than in arithmetical proportion."

In contrast, Adam Smith utterly lacks a deeper comprehension of scientific-technological progress and of economic growth. For Smith, the division of labor itself, and frugality, are the decisive driving forces of the growth of the "wealth of nations." Smith understands "division of labor" in the sense of the allocation of manual steps of labor in the production of goods. Technical innovation in the process of production, as the initiator for the division of labor, plays no role at all in Smith's conception. The division of labor in the economy interests Smith only with respect to processes of exchange, i.e., commerce. Technological innovations in production, and the invention of new products, as the real cause of the social division of labor and economic growth, are beyond Smith's ken.

Smith, touted as the "father of the industrial revolution," has no comprehension of technological progress. There had been prototypes of the steam-engine since the early 18th century. In 1769, seven years before the publication of the *Wealth of Nations*, James Watt developed the first fully operational steam-engine, but Smith makes no reference whatsoever to the steam-engine and its enormous economic potential. Smith, instead, is concerned that improved, and, therefore, initially more expensive machines, might reduce the profits of the entrepreneurs. Smith wants to use cheap and simple machinery in labor-intensive forms of production. He argues that the use of improved machines binds capital which could have been more profitably employed elsewhere:

"A certain quantity of materials, and the labour of a certain number of workmen, both of which might have been immediately employed to augment

the food, clothing and lodging, the subsistence and conveniences of the society, are thus diverted to another employment... It is upon this account that all such improvements in mechanics, as enable the same number of workmen to perform an equal quantity of work, with cheaper and simpler machinery than had been usual before, are always regarded as advantageous to every society."

For List, the idea that lowering the standard of living of the working population can increase economic wealth, is an absurdity. While Adam Smith pleads for reducing wage-costs and for lengthening the working time -- "capital formation" by "saving" -- List states: "Bad nutrition just generates a stunted and feeble work force and destroys the productive capacities of succeeding generations."

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### Smith's *Axiom of Ignorance*

In the Philadelphia speech mentioned above, List assaults the second axiomatic dictum of Smith's system: the *axiom of ignorance*. Smith claims that, apart from being able to accept the effect of the mechanism of the free market, the development processes of a national economy are not accessible to the human mind. The efficacy of the market mechanisms, i.e., the price-mechanism of supply and demand, is usually described with the mystifying expression of the "invisible hand."

According to Smith, human beings have "a strong desire" to find out "the proper means" of bringing about "universal happiness" or "the welfare and preservation of society." This desire is opposed by the "weakness of his powers," "the narrowness of his comprehension" and the "slow and uncertain determinations of our reason." It thus follows, that "Nature has directed us to the greater part of these by original and immediate instincts: hunger, thirst, the passion that unites the two sexes, the love of pleasure, the dread of pain, prompt us to apply those means for their own sake, and without any considerations of their tendency to those beneficent ends which the great Director of Nature intended to produce by them."

Any effort to know which goes beyond this is not the affair of human beings. Such an attempt to know, according to Smith, will always be assaulted by countless illusions. For no human wisdom or knowledge will ever be sufficient to achieve the capability of comprehending the lawfulness behind the development of an economy as a whole.

From this follows Smith's categorical claim, that it is impossible to reasonably form that which one can not know. It were thus absolutely impossible to steer the economic activity of "private people" in the direction of "employments most suitable to the interest of the society". Smith further writes:

"The statesman, who should attempt to direct private people in what manner



they ought to employ their capitals, would not only load himself with a most unnecessary attention, but assume an authority, which could safely be trusted to no single person, to no council or senate whatever, and would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it."

**In the sixth letter of the Outlines,** List discusses Smith's anti-dirigist postulates more directly, and also explains the factors which determine the growth or decline of national economies:

``An individual, in promoting his own interest, may injure the public interest; a nation, in promoting the general welfare, may check the interest of a part of its members. But the general welfare must restrict and regulate the exertions of the individuals, as the individuals must derive a supply of their strength from social power... It is bad policy to regulate everything and to promote everything, by employing social powers, where things may better regulate themselves and can be better promoted by private exertions; but it is no less bad policy to let those things alone which can only be promoted by interfering social power.

``Look around, and you see everywhere the exertions and acts of individuals restricted, regulated, or promoted, on the principle of the common welfare. The commonplace of *laissez faire et laissez passer*, invented by a merchant, can therefore only be alleged sincerely by these merchants.

"This principle would only be true if individual and national interest were never in opposition. But this is not the case... Notwithstanding an absence of liberal institutions may be extremely injurious to a full development of the productive powers of a nation, some classes may find their reckoning in this bad state of things. The nation may suffer from an absence of manufacturing industry, but some people may flourish in selling foreign manufactures. Canals and railroads may do great good to a nation, but all waggoners will complain of this improvement. Every new invention has some inconvenience for a number of individuals, and is nevertheless a public blessing. A Fulton may consume his whole fortune in his experiments, but the nation may derive immense productive power from his exertions. An individual may grow rich by extreme parsimony, but if a whole nation would follow his example, there would be no consumption, and, in consequence, no support of industry. The more the individuals of the southern states endeavor to supply the low price of cotton in England by planting greater quantities, the less will cotton bring in England; the less will the nation derive income from that branch of industry. Individuals may become rich by hazardous bank schemes, but the public may lose by them.

``Without interference of national power there is no security, no faith in coined money, in measures and weights, no security for the health of

seaports, no security for the commerce at sea by the aid of a navy, no interference for the citizens in foreign seaports and countries by Consuls and Ministers, no titles to land, no patents, no copyright, no canals and railroads, no national road. Industry entirely left to itself, would soon fall to ruin, and a nation letting everything alone would commit suicide."

As List repeatedly emphasizes in his American writings, the conception of the state which he favors, is expressed in the American Constitution in clear words. The American Constitution obliges the government and the Congress to act in order "to promote the general welfare." This is not an abstract postulate: it is the responsibility of Congress to employ the taxes collected, other fee and customs duties for the general welfare, in order to "create the greatest quantity of common welfare in the interior and the greatest quantity of security as regards other nations." The government has "not only the right, but it is its duty" to do so, List writes in the second letter.

List thus does battle for the right of nations to economically develop, to increase their prosperity and their political power, but not in the sense of a destructive nationalism which seeks to enrich itself at the cost of other nations, but solely through the development of its own "productive powers."

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## **Alexander Hamilton and the "American System"**

List's basic conceptions, which had already crystallized at the beginning of the 20s, underwent a more profound development under the impression of the specific conditions in the United States, about which he wrote:

"The best book one can read in this new country on the subject of political economy, is that of life itself... I have read this book eagerly and diligently and I have attempted to bring the lessons learned thereby into accord with the results of my earlier studies, experiences and reflections."

List was profoundly influenced by American economic theory. The quality, indeed the very existence of this American economic theory -- the "American System" -- has been largely displaced in public consciousness today. The key figure for the economic theory and policy of the "American System" is undoubtedly Alexander Hamilton (1757-1804), who was Secretary of the Treasury from 1789 to 1795 under George Washington. It was Hamilton who first coined the notion of "productive powers." Hamilton is the author of three crucial works in the history of economic theory: *Report on Public Debt* (1790), *Report on a National Bank* (1790) and *Report on Manufactures* (1791). The core of the three reports can be summarized as follows:

The government of the United States must pursue an active or dirigist financial and economic policy.

Hamilton refers to the Preamble of the American Constitution, which obliges Congress and government "to promote the general welfare" and to Article 1, Section 8 which "gives Congress power to lay and collect taxes, duties, imports, excises, payment of debts, and provide for common defence and general welfare; borrow money, regulate foreign and domestic commerce; establish rules of bankruptcy and naturalization; coin and regulate value of money; ... declare war; raise and support armies and militia; provide and maintain a navy..."

According to Hamilton, "the intrinsic wealth of a nation is to be measured, not by the abundance of the precious metals contained in it, but by the productions of its labor and industry." Consequently, "the state of agriculture and manufactures, the quantity and quality of its labor and industry must influence and determine the increase or decrease of its gold and silver," and not the reverse.

A National Bank is to be created to increase the national wealth, which promotes the development of "productive powers" (agriculture, manufactures, infrastructure) with credits as a government institution.

The capital base of the National Bank must not be limited to the currently available volume of precious metals, **but must include assets in the form of debt titles of the U.S. Government.** Thus may the volume of credit issuance be extended as appropriate to the productive potential of the economy.

The promotion of inventions, "mechanic improvements," new machines and plant for industry, is necessary. This can be achieved by means of credits of the National Bank, state subsidies and state contracts. These state-promoted improvements contribute to expanding manufactures and industry, and thus create new jobs and secure the sale of domestic agricultural produce on the domestic market.

"Protecting duties" against competing, cheaper products from abroad are legitimate and necessary in order to protect the domestic production which is in the process of growth, but not yet capable of competing internationally.

Protective tariffs must, however, be well considered and measured, they must not have the effect of causing lethargy, but must have a stimulating effect.

Improvements in transportation infrastructure, especially the construction of roads, bridges, canals, is a priority task of the state at the federal, state and local levels of government, because they reduce the costs of production and create the conditions for a real domestic market.

The practical application of these principles of Hamiltonian economic policy

allowed the United States to quickly overcome its financial and economic turmoil, into which it had fallen in the aftermath of the War of Independence. The National Bank played a prominent role in the consistent economic development which followed. The Bank opened its doors on December 12, 1791. Under the pressure of the slave-holding cotton and tobacco planters and their exporters, the National Bank was abolished in 1811. Following the second American-British war of 1812-1814, however, the Second National Bank of the United States was founded in 1816, and it exerted a similarly stimulating and growth-promoting influence on the American economy as its predecessor.

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## Mathew Carey

Following the assassination of Alexander Hamilton in 1804 in a duel, Mathew Carey (1760-1839) became the driving force of the American System in politics and journalism. Carey was from Ireland, where in his youth, he came into conflict with the British occupation regime there. He was exiled and then traveled to France, where he collaborated with Benjamin Franklin. After a brief sojourn back in Ireland, Carey went to the United States and settled in Philadelphia, where Franklin, too, spent the last years of his life.

Carey became involved in intense political-journalistic activity in support of Hamilton's economic policy. He published newspapers and a number of essays, brochures and books. He was also active, for a number of years, on the Board of Directors of the Philadelphia branch of the National Bank. In 1819, Carey founded the "Society for the Promotion of National Industry at Philadelphia."

In an 1819 essay, in which he polemicizes against Adam Smith, it becomes quite clear how closely Carey associates his own thinking with that of Alexander Hamilton. He calls Smith the "Delphic Oracle of political economy." The practical application of Smith's "poisonous theory" would necessarily lead to economic collapse, the impoverishment of the population and the loss of national independence.

In 1826, Mathew Carey was the co-founder of the "Society for the Promotion of Manufactures and Mechanical Arts in Pennsylvania." Friedrich List was introduced to the people who founded this Society by General Lafayette in 1825. The Society proved to be of crucial importance for List's work in the United States. List's *Outlines*, which is composed in the form of correspondence, is directed to the vice-president of the Society, Charles Jared Ingersoll. List met Mathew Carey personally a number of times and read his works. The Society provided for the republication and circulation of Hamilton's three *Reports*, with a Foreword by Carey. List studied Hamilton's essays and quotes them in the *Outlines* as well as in

other writings composed in America and in the National System.

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## Developing the Productive Forces

In the third letter of the *Outlines*, List names the historical personalities who explicitly promoted an economic policy aimed at the development of the productive forces, i.e., the development of their ``national economies: the English King Edward III (1327-1377); the English Queen Elizabeth I (1558-1603); the French ``Minister of Economy" Jean-Baptiste Colbert (1619-1683); the French economist Baron de Turgot (1727-1781); the Prussian King Frederick II (1740-1786); the Austrian Emperor Josef II (1741-1790); the British statesmen William Pitt (1708-1778) and Charles James Fox (1749-1806); Napoleon Bonaparte (1769-1821); as well as the Americans George Washington (1732-1799), Thomas Jefferson (1743-1826), and Alexander Hamilton (1757-1804).

- [Charles Dupin, Jean Antoine Chaptal, Antonio Serra](#)

With the exceptions of Turgot and Hamilton, the list consists exclusively of political personalities. List prominently cites the Frenchmen, Charles Dupin (1784-1873), and Jean Antoine Chaptal (1786-1832) as exemplary economists.

In the *National System*, List pays special attention to the Italian economist, Antonio Serra (born 1570, date of death unknown). Serra's *Discourse on the Sources of the Wealth of Nations without Gold and Silver Mines* (Naples, 1613) is, indeed, a very important contribution to the development of modern economic theory. Serra distinguishes two categories of wealth creation, the *accidenti proprii* and *accidenti communi*. The former denote the creation of wealth by (a) the availability of gold and silver mines, (b) particularly favorable geographical conditions, fertile soil, and (c) a geographical position which favors trade.

But these three conditions -- *accidenti proprii* -- apply only for few nations. Thus, the *accidenti communi* are decisive. These are: (a) crafts and manufactures, (b) the ``quality" of the population in the sense of mentality, education and culture, and (c) the predominant policy of the state. These *accidenti communi* or ``subjective" factors are valid for each nation and any economy, quite apart from raw material resources, geography, and climate.

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## Crafts and Manufactures

For Serra, crafts and manufactures are the most important sources of wealth, even more important than agriculture. Nature still plays the dominant role in agriculture, while the crafts and manufactures are directly determined by human labor and the human mind. Thus, the production of the products of the crafts and manufactures can be increased, practically without limit, and these products can also be transported over long distances. The increase of production of the products of the crafts and manufactures is decisively determined by the educational level of the population. The policy of the state must, therefore, provide that economic knowledge in the production of the products of the crafts and manufactures is broadly proliferated.

Serra emphasizes the superiority of those finished products ennobled by human labor to raw materials and semi-finished products from agriculture and mining. The state must, therefore, see to it, that the main emphasis in the domestic economy is put on the crafts and manufactures. These refined products -- and not raw materials -- must be exported.

Serra's economic theoretical and political principles were already applied in the 15th century in France under the government of King Louis XI (reigned 1461-1483). Louis XI was directly influenced by the Florentine Renaissance, and defined the state by the principle of the common good -- *le bien public*, *bonum commune* or commonwealth.

This truly revolutionary reconception of the notion of the state as a nation-state, or republic is explicitly contained in Louis' book, *The Rose-Bush of War*, a form of instruction on government written for his son.

On the basis of the principle of the commonwealth, Louis XI created the first modern nation-state and the first modern national-economy, in which the priority lay upon increasing the wealth of the nation state as a whole, not only that of the royal dynasty, the feudal class, and a small layer of traders. Under Louis XI, it became a goal of economic policy to increase the wealth of the state by bringing about the general elevation of the material and cultural conditions of life of the population. It was recognized, that an uneducated and dulled population, one bound to tradition, would not be capable of increasing the national wealth.

Under Louis XI, a unified coinage was introduced. His system of taxation favored urban crafts and an early form of urban manufactures; it penalized the unproductive layers of society, including the nobility. Immigration of skilled foreign labor was promoted; improvement of the streets and ports was begun; measures were introduced regulating conditions of labor, hygiene and law, and which reduced the arbitrary power of lesser authorities.



National-economic policies, based on the principle of the commonwealth, were continued following Louis XI by Jean Bodin (1520-1596). Bodin was more an economic theoretician, who systematically explored the instruments at the disposal of the state for promoting the increase of national wealth.

Among these, protectionist measures played a prominent role: imports of foreign, finished products, and exports of domestic raw materials were to be taxed; the import of raw materials and the export of domestically produced, or refined, finished products, was financially promoted.

For Bodin, too, the specific promotion of urban manufacturing with royal privileges, grants and commissions, state subsidies for new inventions and tools, reduced taxes, the introduction of norms and controls of the conditions of labor, all had a high priority. Needless to say, these principles were then also inherited in the French economic policy of Jean-Baptiste Colbert in the 17th century.

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## The Early Cameralists and Leibniz

See Appendix: [What Is Cameralism?](#)

The just sketched economic policy ideas in France and Italy also formed the basis for the early cameralists in the German-speaking areas of Europe. Leading cameralists were Melchior von Osse (1506-1557), Ludwig von Seckendorff (1626-1692), Johann Joachim Becher (1635-1682), Philip Wilhelm von Hoernigk (1640-1714), and Johann Daniel Krafft (1624-1697).

As already mentioned, the notion of "productive forces" comes from Alexander Hamilton. The content of this fundamental concept can easily be traced back to Louis XI, Bodin, and Colbert. The same holds for the early German Cameralism. One of the large "black holes" in the history of economic theory is the exceptional role played by Gottfried Wilhelm Leibniz (1646-1716) in early German Cameralism and, thus, the role he played in the formulation of the economic theory of productive powers. Today, Leibniz's importance for economics is forgotten, Leibniz is acknowledged as a philosopher, mathematician, and scientific organizer. Hardly anyone except a few scholars knows the "political Leibniz." The suggestion, that Leibniz made an essential contribution which -- albeit indirectly -- influenced Hamilton and List, is most often met with incredulity.

Leibniz not only met Colbert personally many times, he had an active relationship with the Cameralists Becher, Hoernigk, and Krafft even prior to these meetings. With Krafft, who visited the English colonies in North America in the 17th century, Leibniz had a lifelong friendship. Between 1668 and 1673, Leibniz was in the service of the Mainz Elector Prince Johann Philip von Schoenborn (1605-1673). Leibniz wrote a number of essays on economic theory and policy in this period, works which are of fundamental importance for the theory of productive

powers, or ``physical economy." In the following, we shall sketch how Leibniz solved the central question of economic theory which could not be solved between the mid-15th century and the mid-17th century.

For Leibniz, the content of economics is the promotion of the common good. He speaks of *bonum commune*, *bonum publicum*, or ``welfare of the fatherland." The takeoff point for his economic investigations is the issue of the nature of human beings, which is determined, for Leibniz, by man's being in the image of God, *imago viva Dei*. Thus, man is characterized by creative reason, and love of God and his fellow man (*caritas*).

Leibniz's image of man is, thus, contrary to the modernist conception, elaborated by Adam Smith in his *Theory of Moral Sentiments*, 1759) and then, in the *Wealth of Nations*. Smith's ``economic man" is a person whose thought and deeds are determined primarily by the pleasure principle, greed, striving for domination as well as a natural inclination to exchange. Since the intellect of human beings is weak and limited, it is arrogance, according to Smith, to attempt to promote or guide the development of a national economy according to criteria of reason. Therefore, the ``invisible hand" sees to it, that instinctual and egotistical behavior in the process of exchange at the market, leads nevertheless, to the general good.

For Leibniz, the love of the neighbor and reason are not arbitrary criteria: human nature is endowed with these qualities, such that ``natural communities are maintained and promoted." The negation of this potential of human nature necessarily has a destructive effect upon the existence of social formations. That is true of the family as well as for larger social communities.

The material and intellectual-psychological reproduction of the family is lawfully only possible on the basis of the love of one's neighbor and Reason. Egoism, as the ordering principle in the family, would necessarily destroy that family.

What is true for the family, says Leibniz, is also true for nations and national economies. Thus, the existence of populations whose ``social systems of value" are based on egotism, greed, or domestic exploitation and imperialism abroad, can not be secured over the long run.

Leibniz was a realist who had no illusions about the widespread negation -- individual and social -- of the inherent potential of human beings. Leibniz looked upon the modern ``post-Christian" image of man and society, as elaborated by Adam Smith, as a self-destructive folly.

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## Creative Reason and the Common Good

For Leibniz, creative reason, the second characteristic of the nature of human beings, must be directed to the common good. Progressing scientific knowledge of

nature, research and discovery, must be consummated in good deeds and works for the improvement of the spiritual and material conditions of life of the general population. Scientific knowledge, according to Leibniz, must result in the promotion of improvements of "mechanics", "the material of labor," and thus the "nourishment of the poor." The "handcrafts" must be improved with "machines," "iron and steel works," and, in general, new "instruments," to which end "everything in chemistry and mechanics should be tested." "Manufactures" should be established, which efficiently refine raw products. This may also contribute to an "extermination of price increases." "Trade and Commerce must be initiated, which begin with the sciences which have the advantage, that they are inexhaustible and their employment makes nothing more expensive."

The emigration of impoverished layers of the population must cease, which must instead "be given work so that they can feed their wives and children." Idle land must be "populated by families and put to use". A general education for the broad population must be established. Improvements in medicine are necessary, especially to eradicate epidemics. The realization of this economic program, says Leibniz, is not an "utopian chimera." His proposal, he insists, is not to compose a utopia like Campanella (1568-1639), Thomas Morus (1478-1535), or Francis Bacon (1561-1626). It is easily comprehensible, that the expenditures and the costs involved by his proposals, are far less than the economic benefits for the general population which would ensue from them.

"With a moderate fund and some slight measures of support", this "[economic] machine can be set into motion. Then a continuous economic metabolism will conserve and increase the fund." Welfare will grow "continuously," "without end." There is no upper limit to the growth of the economy.

The proposals and remarks just cited, are from Leibniz's *Memorandum on Society and Economy* of 1671, in which he proposed the creation of a German Academy of Sciences and Arts. But Leibniz' "Societät" is no academy in the sense currently understood: it is a center for science and research, a "think-tank" which also carries out broad ranging steering and guidance functions for the economy. Leibniz's "Societät" might be seen as a predecessor of the French *Commissariat du plan* under General de Gaulle (1890-1970).

In that sense, the *Memorandum on Society and Economy* coheres with the level of development at that time in economic theory in Italy, France, and Germany. It was known, that population growth is a prerequisite for the growth of the labor-power of a nation, and thus also for the growth of national economic wealth. But it was also recognized, that the mere extension of the available volume of labor power in the sense of manual labor of more people, together with that of animals, wind, and hydropower, would not be sufficient to provide for lasting increases in economic wealth.

In 1662, Johann Joachim Becher published his *Political Discourse: On the Causes*

*of Growth and Decline of Cities and States*. He wrote there, that a growing population is the prerequisite of growth, but that the growth of population must go hand in hand with the growth of agricultural and other production. Becher distinguished the goods-producing ("nourishing") classes in agriculture and manufactures, which he calls "the healthy body of the economy," from the "superstructure," the government, administration, the church, arts and sciences. Becher recognized, that certain proportions must prevail between these two main classes. Becher also made a number of proposals for detailed improvements in agriculture, mining and manufactures.

**But Leibniz understood, that economic development requires fundamental technological progress, and not only incremental improvements.**

Leibniz recognized, that the economic base-technology had to be fundamentally changed. In Leibniz's lifetime, the basis for the economy was still human muscle-power, animal-muscle-power, waterwheels, and windmills. These sources of power moved simple machines and means of transportation. The efficiency of these available potentials of power could not be essentially expanded by means of incremental technical improvements. The power-potentials available would have to be qualitatively and quantitatively extended by a technological revolution.

***In his Memorandum on Society and Economy*, Leibniz writes: "Since the movement of all machines derives either from the weight of the earth, from the inseparability of water, from the power of compressed or decomposed air, or from fire," the aim must be to subjugate these elements to "the human yoke." The aim is "to subjugate nature to art."**

In order to bring about a fundamental improvement of manufactures and the instruments of the handicrafts, one must have "continuous and efficient fire and movement" available, "as the basis of all mechanical effects." Thus, all "ideas and concepts, one's own and those of others, must be tested, and this must not be procrastinated," Leibniz writes in the same memorandum. Leibniz thus understood the necessity of a power machine, if there were to be a decisive development of the economy.

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## **Early "Heat Machines"**

Leibniz actively followed the development of the first heat-machines. Early work in this direction was done by Christian Huyghens (1629-1695) in Holland, who was in personal contact with Leibniz. Denis Papin (1647-1714) developed the first functioning steam engine between 1690 and 1706. Leibniz and Papin corresponded on this development.

Leibniz wrote:

``I am most happy to learn that you insist on developing these fire machines, for it seems to me one of the most important endeavors in mechanics."

Leibniz to Papin in another letter:

``I am enthused by the good progress of your fire machine, because I think, once it will have reached perfection, it can be very useful. Therefore, it wouldn't matter if it would earn only one third of the expenses."

And Papin wrote to Leibniz, that

``the new invention will enable one or two men, with the help of heat power, to do more work than several hundred rowers."

Leibniz understood, that scientific-technological progress could, and must, qualitatively and quantitatively, extend the power-potential of the economy. The power machine, with its continuous high degree of efficiency, makes it possible to employ tools, machines, and means of transportation, which extend production and transportation by orders of magnitude. It is this insight which makes Leibniz the actual founder of the economic theory of productive powers or ``physical economy."

There is no specific evidence, that List knew of Leibniz's economic policy writings, but the following quote, from List's *Natural System*, demonstrates how close List and Leibniz were, conceptually, with respect to the notion of productive powers: ``Mental work is, in social economy, what the soul is to the body. By means of new inventions, it continuously increases the power of the human being. Let us here recall only the achievements of the few to whose work we owe the invention and perfection of the steam engine....They have provided a small number of people with the power which had required millions of hands earlier."

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## Conference of the Friedrich List Society September 1931

We take the opportunity here to include a reference to the economic and finance policy debate in Germany during the world economic crisis in the 1930s, which -- in contrast to Keynes -- was directly connected to the economic policy conceptions of List and Hamilton. The transcript of the secret conference of the Friedrich List Society of September 16-17, 1931, was published for the first time in 1991. The issue at the conference was the possibility and consequences of expanding credit issuance in order to boost German economic activity under conditions of world economic crisis.

In addition to Reichsbank president, Dr. Hans Luther (1879-1962), some 30 leading economists, bankers, industrialists and economic politicians participated, including Prof. Edgar Salin (1892-1974), co-publisher of List's *Gesammelte Werke* (*Collected Works*).

The keynote speech was given by Dr. Wilhelm Lautenbach (1891-1948), a high official in the Economics Ministry, and an important, although now little known economic theorist. He was a member of the Friedrich List Society and took part in every one of its conferences during the years 1928-32, where priority issues of the German economy were discussed.

In Lautenbach's memorandum, "The Possibilities of Boosting Economic Activity by Means of Investments and Expansion of Credit," he writes, "The natural course for overcoming an economic and financial emergency" is "not to limit economic activity, but to increase it." Lautenbach distinguished two emergency situations: on the one hand, there were emergencies out of which "tasks for production ensue." As an example of this kind of emergency, he cited a war-economy, the conversion from war-production to peace-time production, or also the "reconstruction of Japan following the great earthquake" in 1923.

On the other hand, there were economic and financial emergencies of national and international dimensions, in which it was clear, in general, that "we should and want to produce more. But the market, the sole regulator of the capitalist economy, does not provide any obvious positive directives."

The economic emergency of the second category -- a depression and/or a collapse of the financial system -- was characterized by the "paradoxical condition," that "despite curtailed production, demand is less than supply and thus leads to the tendency to decrease production further."

Under conditions of depression, there are normally two economic policy reactions. The first was a policy of deflation: the budget deficit is reduced by cutting state expenditures, prices and wages are lowered. At the same time, credit is restricted. If credits are not curtailed, low interest rates would lead to an outflow of foreign capital, which endangers the exchange rate and produces yet greater scarcity of available capital for the domestic economy.

Lautenbach thought it was practically impossible to reduce taxes in a depression, because the tax base had already contracted and public budgets were already strained for resources. All of these measures, according to Lautenbach, produce "new and large losses of capital for the individual entrepreneur in commerce and industry", it makes them "uncompetitive and insolvent", compels a "reduction of production and layoffs of the workforce in large dimensions", and also leads to "a deterioration of the status of the banks."

The reduction of public expenditures is doubly counterproductive, since public contracts and mass purchasing power are further reduced.



The reduction of wages has an initially favorable effect upon exports, but it causes a far greater reduction in demand in the domestic economy.

“The adjustment to reduced demand by correspondingly reducing prices causes losses... and draws additional reductions of production in its wake.” Thus, the growing unemployment, effects an acceleration of the downward spiral of the economy. Thus, Lautenbach argued, the deflationary policy will “inevitably lead to complete economic and political catastrophe.”

But, in a depression, there are “surpluses of commodities, unused production capacities, and unemployed labor.” The use of this “largely unused latitude for production” is “the actual and most urgent task of economic policy, and it is simple to solve, in principle.”

The state must “produce a new national economic demand,” which, however -- and this is the condition -- “represents a national investment for the economy.”

One should think of tasks like... public or publicly supported works which signify a value-increase for the economy and would have to be done anyway, under normal conditions.”

Lautenbach was thinking primarily of transportation infrastructure in this connection (roads/highways and railroads).

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## How to Finance Public Works

Then Lautenbach posed the question: “Since long term capital is available to us, neither on the foreign, nor on the domestic market, how are such projects to be financed?” And, he adds, “reasonable public works are already neglected, in times of deep depression, due to the empty treasury.” If there is no possibility to finance the projects through the state treasury, nor through capital markets, “the conclusion to be drawn, ought not be, that it is impossible to realize projects of this sort.”

But how? Lautenbach makes the initial observation, that “liquidity is chiefly a technical, organizational issue. Banks are liquid when they are sufficiently supported by the Reichsbank.”

The degree of actual claims upon the Reichsbank in the credit expansion of the private banks for financing measures to create jobs and investments, was always only a fraction of the total credit volume provided for these projects.

Lautenbach proposed, that the Reichsbank give the banks a “rediscount guarantee” for the bonds for financing the “economically reasonable and necessary projects.”

The short-term credit financing by means of discountable, prolongable bonds for

creating jobs and investments, had a direct and an indirect effect.

The realization of the projects, financed by credits, signified an increase of production with the productive utilization of machines, raw materials and operating materials. The demand for capital goods would increase. The financial situation of the businesses would relax, and thus also the situation of their banks. The realization of the projects on credit would entail payment of wages to newly engaged labor, which would have the effect of generating additional demand for consumption goods.

Lautenbach proceeded on the assumption, that "the stimulating effect of the primary credit expansion" for financing infrastructure projects, would effect "a stimulating movement in total production" in the economy. The initial boost of infrastructure and investment projects would lead to the "upward conjuncture" of the entire economy. The utilization of unused capacities of production would have the effect of increasing economic productivity.

**The improvement of tax-income would enable the state to shift to a long-term management of the original liquidity provided to pre-finance the projects.**

To the fear, that credit-financing of infrastructure projects would incur the risk of inflation, Lautenbach said that such projects are "rational and unobjectionable from an economic standpoint." These projects represented "in a material sense real economic capital formation." The credit-financing would result in the creation of real economic values. Lautenbach furthermore emphasized that the expansion of credit and the expansion of production in infrastructure projects are disproportional. "The extent and rate of the expansion of production" grows at much higher rates than the "degree and rate of credit expansion." Here, Lautenbach was apparently thinking of a "productive multiplier effect."

In summary, Lautenbach said,

"by means of such an investment and credit policy, the disproportion of supply and demand on the domestic market will be alleviated and thus total production once more provided with a direction and a goal. If we neglect to undertake such a policy, we will inevitably be heading in the direction of continuing economic disintegration and a complete disruption of our national economy, into a condition which then, in order to avoid domestic political catastrophe, one will be compelled to undertake a strong increase of new, short-term public debt for purely consumptive purposes, while today we have the instruments, by means of utilizing this credit for productive tasks, to bring both our economy and our public finances into balance once more."

Had the Lautenbach Plan of 1931 been implemented, economic and political conditions would have prevailed two years later, under which the National Socialists would not have had a chance to come anywhere near seizing power. The

Israeli historian of economics, Prof. Avraham Barkai (born 1921) is correct, when he writes, that a real historic chance did exist to prevent the Nazis from seizing power,

"if earlier governments, economists and politicians had freed themselves of the chains of outmoded economic and financial principles, and if they had applied anti-cyclical economic policies earlier."

It ought to be obvious, that the Lautenbach Plan bears a great conceptual resemblance to the way in which the National Bank of Alexander Hamilton functioned. This plan also demonstrates a real-economy-oriented approach to problems of financing, which is typical of Friedrich List. It was certainly not accidental, that the Friedrich List Society sponsored this conference, with this theme, and with such a circle of participants. The strengths of List's economic policies are evident also and particularly under conditions of severe economic crisis, when, quite directly, the social and political existence of a nation depends upon the utilization of the unused and debilitated productive forces.

It also ought to be clear, that the Lautenbach Plan was certainly no mere economic historical episode. Its relevance for today is direct. This will become clearer as we now turn to the current economic policy discussion in the United States.

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## **The Debate over the American System in the United States Today**

A profound debate on the fundamentals of economic policy occurred recently (1995-1996) in the American public domain. In the following, we shall sketch how this debate unfolded, because we believe that it is not an ephemeral phenomenon. What is at stake, is whether or not the United States will continue the neoliberal economic policy of the past 25 years, or whether a far-reaching change will be introduced in economic policy. The key issues in this debate are the "economic insecurity" of the middle class, reductions in the real income of the majority of the population, stripping of industry, "free trade," "globalization", and financial speculation, as well as the role of the state in economic policy.

The issue of the threatening collapse of the financial system is increasingly at center stage, for the gap between the exponential growth of financial aggregates and stagnating or shrinking real economic factors, is growing ominously. In fact, the issue is not *whether* there will be a systemic financial crisis, but *when*.

A return to the economic policy principles of the American System is under discussion as an answer to the cited symptoms of crisis. In this debate, the economic policy of Presidents Franklin Delano Roosevelt and John F. Kennedy, are associated with the American System, but there are increasing references to

Hamilton, Carey and List. To avoid misunderstanding here, it should be noted, that the economic policy of Presidents Roosevelt and Kennedy were, in fact, firmly embedded in the tradition of the American System. The new economic debate is, indeed, characterized by some party-tactical maneuvering and also political inconsistency, but, as will become clear in the following, this debate bears an uncanny resemblance to the fundamental economic policy arguments at the time of Alexander Hamilton and Friedrich List. For this reason, it seems justified, even necessary, to sketch this debate in rough outline.

Lyndon LaRouche has played the central catalytic role, intellectually and politically, in this new debate on economics in the United States. Currently (Spring 1996), the political center of this debate, lies in a group of leading Democratic Senators and Congressmen around Senator Edward Kennedy. There are individuals also in the Republican milieu who are beginning to take their distance from the neoliberal ideology of the "free market" and the "Conservative Revolution."

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## **The "Conservative Revolution"**

The influence of ultraliberal economic policy in the U.S., reached a high point during the presidency of George Bush (1988-1992). The chief intellectual source of this economic policy was the radical free-market economic, or "Thatcherite" ideology of the Mont Pelerin Society, which bases itself on the Viennese economic ideologue, Friedrich von Hayek. A number of institutions, among them the Heritage Foundation, launched a broad propaganda offensive at the end of the 1970s in favor of an ultraliberal, economic ideology. The military and military-technological requirements, under conditions of the East/West conflict, had set strict limits to the actual application of such Thatcherite economic policy in the U.S. during the presidency of Ronald Reagan. But under George Bush, reduction of industrial capacities ("downsizing"), income reduction for the majority of the population, and unemployment gained the upper hand. In parallel, corporate profits ("shareholder value") increased by radically reducing the costs of material and personnel in production. Tax reductions for the higher-income earners were forced through, which, together with the deregulation of the financial markets, became an important factor in the exploding financial speculation. The free-trade policy allowed imports to grow, and the balance of trade deficit deteriorated further. "Downsizing" in a number of particularly crucial branches of industry, such as machine tools, made this branch of industry practically disappear.

In November 1991, the New York banker, Felix Rohatyn, stated: "We have just experienced the end of a decade characterized by the greatest speculation and financial irresponsibility. Financial deregulation, easy money, loose banking oversight, together with the degradation of our system of values have brought

about a religion of money and greed ... The financial speculators have turned our country into a casino."

It was chiefly economic and social factors which led to the defeat of George Bush's bid for reelection in 1992. But under the presidency of Bill Clinton, there was once again a neoliberal counter-movement in the interim congressional elections in November 1994, which called itself the ``Conservative Revolution." The Speaker of the House of Representatives, Newt Gingrich, assumed the role of leader in this movement. Gingrich's ideological-political program for the ``Conservative Revolution" became known as the ``Contract with America;" its chief contents were:

- Radical free-trade policy, consistent promotion of ``globalization" in the financial and commodities sectors, while also demonizing protectionism;
- Propaganda for the ``post-industrial" (actually anti-industrial), ``information society";
- Reduction (``downsizing") of the federal government and government authorities, privatization and deregulation of various functions of the state, particularly in the economic area, radical rejection of all forms of ``dirigism" in economic policy;
- ``Balancing" the budget by means of draconian and comprehensive cuts in social services; annulment of social services for the elderly, disabled, and the poor at the federal level, propagandizing for a social-darwinist, paradigm shift.
- Tax reductions for the higher income earners ("capital gains tax"); relaxation or annulment of controls on financial speculation; support for ``shareholder value" corporate policies.

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## **Resistance vs. the Conservative Revolution**

The program of the Conservative Revolution is a radical counter-design to the American System. It was inevitable, that resistance would develop against such a neoliberal battle-program, and it did. LaRouche was the first to launch a targeted counterattack against the Conservative Revolution. He demonstrated, that the economic ideology embodied in the Contract with America, corresponds precisely to the ``British System," and is, therefore, diametrically opposed to the American System.

Moreover, the program of the Conservative Revolution is anti-constitutional, it contradicts not only the spirit but also the concrete stipulations of the American Constitution, and that not only with respect to the provisions for the general welfare. LaRouche countered Gingrich's demagoguery on the ``balanced budget:'

“The problem of the budget is not that we are spending too much money. We are not spending any more money than we had planned in the 1960s. But the real economic base in businesses and for workers, and thus the tax base, has collapsed in the meantime,”

he said.

Senator Edward Kennedy (D-Mass.) also moved into open opposition to the Conservative Revolution. Speaking before the National Press Club in Washington on January 11, Kennedy said that the core of every economic policy had to be “jobs, the expansion of jobs, good jobs, well paid.”

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## FDR and JFK

Presidents Franklin D. Roosevelt and John F. Kennedy understood, that economic growth is the driving force of the American nation, the Senator asserted.

“I believe in free enterprise, but I believe in active government too ... A federal program is not the solution to every problem. But there continues to be an important federal role in solving the problems of our society by investing in people and the infrastructure needed for our country to succeed and our citizens to thrive. To believe otherwise is hostile to the basic values of our country and to the historic concept of 'we the people' in our constitution. We must not rob the people of the resource of government. It is their government, and we must make it work for them ... People want government to be lean, not mean. There is a large difference ... between using government to promote the general welfare and misusing it to pander to the powerful and punish the powerless ... We must also resist our opponents' mindless anti-government vendetta against regulation, a rhetoric leading to an across-the-board assault on government that hides a multitude of injustices and indifferences.”

With the beginning budget war in the fall of 1995 and the paralysis of the Federal Government, there was a shift in mood of the American population against the ultraliberal ideology of the Contract with America. It became obvious, that Gingrich's draconian budget cuts, in the name of the “balanced budget,” were not only aimed against the poorest at the fringes of society, but especially against the broad middle class of working and retired people. For the first time since the assassination of Martin Luther King in 1968, African-Americans began to articulate themselves once again in the fall of 1995. The peaceful and disciplined Million Man March in October 1995 in Washington, D.C., signified the beginning



of the rebirth of the Civil Rights Movement, and economic and social issues were the crucial factor [here too.

In the Fall of 1995, the American trade union movement woke up out of a daze of nearly 20 years. The issue for the new activist trade union policy is not only to reverse the pattern of reduced membership and improving incomes for the members. The new trade union leadership seems determined to actively intervene into the debate over the larger issues of economic policy and to influence policy in the direction of Roosevelt and Kennedy.

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## Appendix: What is Cameralism?

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Following the Renaissance Council of Florence in 1439-40, which established principles for the science of statecraft, a school of thinkers developed who called themselves *cameralists*, since they formed chambers of advisers to local rulers. The task of the cameralists was to advise rulers on correct policies, especially in economics.

Their thinking spread from Italy into France and thence throughout Europe. Cameralists, or commonwealth adherents, in England played a direct role in transmitting these ideas to the American colonies where, with the benefit of great distance from the European oligarchy, a distillation of their republican ideas was put into practice.

The core concept behind cameralist statecraft was that the prosperity of a state depended upon the adoption of policies which fostered the improvement, materially and spiritually, of the citizenry.

Thus, as opposed to a situation of virtual war between rulers and their subjects, there was conceived to be a scientifically knowable common interest between them. The first purpose of the ruler was to provide for the prosperity of his subjects.

The cameralists are sometimes known as the school of statecraft or economics which based itself on expanding the population. This was based on their view that each individual was a net producer, rather than a mere consumer, of goods, and that the source of wealth in society is not raw materials or land, but the productive powers of labor of individuals.

It was a short step from there to the requirement to improve that productive power, through education and infrastructure and technological advance.

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For more on cameralism, see Nancy Spannaus' article: ["The Roots of the American System: From Cameralism To The American System"](#), *The American Almanac*, 1996.

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