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Remarks by
Alan Greenspan
Chairman
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at the
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Kirkcaldy--the birthplace, in 1723, of Adam Smith and, by extension, of modern economics--is also, of course, where your Chancellor of the Exchequer was reared. I am led to ponder to what extent the Chancellor's renowned economic and financial skills are the result of exposure to the subliminal intellect-enhancing emanations of this area.

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In the broad sweep of history, it is ideas that matter. Indeed, the world is ruled by little else. As John Maynard Keynes famously observed: "Practical men, who believe themselves to be quite exempt from intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back."¹ Emperors and armies come and go; but unless they leave new ideas in their wake, they are of passing historic consequence.

The short list of intellectuals who have materially advanced the betterment of civilization unquestionably includes Adam Smith. He is a towering contributor to the development of the modern world. In his *Wealth of Nations*, Smith reached far beyond the insights of his predecessors to frame a global view of how market economies, just then emerging, worked. In so doing, he supported changes in societal organization that were to measurably enhance world standards of living.

For most of recorded history, people appear to have acquiesced in, and in some ways embraced, a society that was static and predictable. A young twelfth-century vassal could look forward to tilling the same plot of his landlord's soil until disease, famine, natural disaster, or violence ended his life. And that end often came quickly. Life expectancy at birth was, on average, twenty-five years, the same as it had been for the previous thousand years. Moreover, the vassal could fully expect that his children and doubtless their children, in turn,

¹J.M. Keynes, *The General Theory of Employment, Interest, and Money*, 1936, p. 383.

would till the same plot. Perhaps such a programmed life had a certain security, established by a rigid social and legal hierarchy that left little to individual enterprise.

To be sure, improved agricultural techniques and the expansion of trade beyond the largely self-sufficient feudal manor increased the division of labor and raised living standards and populations, but growth in both was glacial. In the fifteenth century, the great mass of people were engaged in the same productive practices as those of their forebears many generations earlier.

Smith lived at a time when market forces were beginning to erode the rigidities of the remaining feudal and medieval practices and the mercantilism that followed them. Influenced by the ideas and events of the Reformation, which helped undermine the concept of the divine right of kings, a view of individuals acting independently of ecclesiastic and state restraint emerged in the early part of the eighteenth century. For the first time, modern notions of political and economic freedom began to gain traction. Those ideas, associated with the Age of Enlightenment, especially in England, Scotland, and France, gave rise to a vision of a society in which individuals guided by reason were free to choose their destinies unshackled from repressive restrictions and custom.

What we now know as the rule of law--namely protection of the rights of individuals and their property--widened, encouraging people to increase their efforts to produce, trade, and innovate. A whole new system of enterprise began to develop, which, though it seemed bewildering in its complexity and consequences, appeared nonetheless to possess a degree of stability as if guided by an "invisible hand." The French Physiocrats, among others, struggled in the middle of the eighteenth century to develop rudimentary principles to untangle that conundrum. Those principles were an attempt to explain how an economy governed by a calculable regularity--that is, natural law and, as characterized by the Physiocrat Vincent de Tournay, "Laissez-faire, laissez-passer"--would function. The Physiocrats' influence, however, waned rapidly along with the influence of other political economists as

evidence grew that their models were, at best, incomplete.

It was left to Adam Smith to identify the more-general set of principles that brought conceptual clarity to the seeming chaos of market transactions. In 1776, Smith produced one of the great achievements in human intellectual history: *An Inquiry into the Nature and Causes of the Wealth of Nations*. Most of Smith's free-market paradigm remains applicable to this day.

Smith was doubtless inspired by the Physiocrats, as well as by his friend David Hume, his mentor Francis Hutcheson, and other participants in the Enlightenment. Early political economists had made impressive contributions, many of them anticipating parts of Smith's global view. But Smith reached beyond his predecessors and subjected market processes to a far more formidable intellectual analysis. One hears a good deal of Franz Joseph Haydn in the string quartets and symphonies of Wolfgang Amadeus Mozart; yet to my ear, at least, Mozart rose to a plateau beyond anything Haydn and his contemporaries were able to reach. So, too, in his sphere, did Smith.

He concluded that, to enhance the wealth of a nation, every man, consistent with the law, should be "free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of ... other ... men."² "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest."³ The individual is driven by private gain but is "led by an invisible hand" to promote the public good, "which was no part of his intention."⁴ This last insight is all the more extraordinary in that, for much of human history, acting in one's self-interest--indeed, seeking to accumulate wealth--had been perceived as unseemly and was, in some instances, illegal.

²Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 1776, p. 687.

³Ibid., p. 26-27.

⁴Ibid., p. 456.

In the opening paragraphs of the *Wealth of Nations*, Smith recognized the crucial role played by the expansion of labor productivity in improving welfare when he cited "the skill, dexterity, and judgment with which labor is generally applied" as one of the essential determinants of a nation's standard of living. "Whatever be the soil, climate, or extent of territory of any particular nation, the abundance or scantiness of its annual supply must in that particular situation, depend upon ... the productive powers of labor."⁵ More than two centuries of economic thought have added little to those insights.

Smith, on remarkably little formal empirical evidence, drew broad inferences about the nature of commercial organization and institutions that led to a set of principles that would profoundly influence and alter a significant segment of the civilized world of that time. Economies based on those principles first created levels of sustenance adequate to enable the population to grow and later--far later--to create material conditions of living that fostered an increase in life expectancy. The latter development opened up the possibility that individuals could establish long-term personal goals, a possibility that was remote to all but a sliver of earlier generations.

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Smith's ideas fell on fertile ground and within a very few decades verged on conventional wisdom. The ancient political power of the landed gentry, the major beneficiaries of the older order, was giving way to a new class of merchants and manufacturers that was a product of the Industrial Revolution, which had begun a quarter-century earlier. Pressures were building in Britain and elsewhere to break down mercantilist restrictions. But with Smith, the emerging elite found their voice and sanction.

Smith's sanction, however, was directed to the freedom of markets and trade, not to the new business elite, many of whose business practices Smith severely deprecated. He

⁵Ibid., p. 10.

concluded that the competitive force unleashed by individuals in pursuit of their rational self-interest induces each person to do better. Such competitive interaction, by encouraging specialization and division of labor, increases economic growth.

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Smith's essentially benevolent views of the workings of competition counteracted pressures for market regulation of the evident excesses of the factory system that had begun early in the eighteenth century. Those excesses were decried a century later by the poet William Blake as "... the dark Satanic mills" that by then characterized much of industrial England.

Perhaps if the *Wealth of Nations* had never been written, the Industrial Revolution would still have proceeded into the nineteenth century at an impressive pace. But without Smith's demonstration of the inherent stability and growth of what we now term free-market capitalism, the remarkable advance of material well-being for whole nations might well have been quashed. Pressures conceivably could have emerged to strengthen mercantilistic regulations in response to the stresses created by competition and to the all-too-evident ills of industrialization.

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Smith was the first in a line of political economists whom we now identify as the classical school. Foremost of his followers was David Ricardo, a stockbroker, parliamentarian, and skilled essayist. Ricardo's major work, *The Principles of Political Economy and Taxation*, published in 1817, offered a rigorous, though less optimistic, analysis of the structure of a system of wholly free commerce.

Under the political onslaught of a rising industrialist class intellectually supported by the classical school, mercantilism was gradually dismantled, and economic freedom spread widely. This process reached its apex with the repeal of Britain's Corn Laws in 1846. The acceptance of classical economics was, by then, broad enough to prompt reorganization of

commercial life in most of the civilized world.

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Adam Smith died in 1790, well before his extraordinary impact could have been assessed. But Ricardo lived until 1823, and John Stuart Mill, another member of the school, lived until 1873. Would they and the other early followers of Smith find the current economic landscape at all familiar?

In one sense, not likely. Among the developed countries, famine is now virtually nonexistent. Thomas Robert Malthus's penetrating analysis at the end of the eighteenth century of the limits of subsistence, to which many of the classical school subscribed, proved wrong.

Malthus built his pessimistic vision on a notion that the long-evident forces of stagnation would persist: A human population with a propensity to grow geometrically would be thwarted by limits to growth in the means of subsistence. Having observed crop yields that had changed only marginally for millennia, Malthus could not have foreseen the dramatic increase in agricultural yields. In the United States, for example, corn yields--or should I say maize yields--rose from 25 bushels per acre in the early 1800s to 160 by 2004.

Moreover, those living in the early part of the nineteenth century could not have imagined that life expectancy in developed countries two centuries later would rise on average to more than twice that which they experienced. That increase directly and indirectly resulted largely from the almost twentyfold increase in average real per capita gross domestic product gained since 1820, according to estimates of Angus Maddison, the economic historian. From this expanding output, society has been able to devote more resources to nutrition, sanitation, and health care.

And yet, regrettably, much of today's developing world would appear familiar to our forebears. Pestilence is present in the form of AIDS, and as a consequence, life expectancy in much of Africa is not much different from what it was in most of the world two centuries ago.

Significant parts of the world still experience periodic famine.

Although workers in developed and many emerging nations have witnessed an extraordinary rise in living standards, some shadow of worker angst of the earlier period remains. Today's vast technological advances and the labor turnover associated with it have not sparked the violence of the early nineteenth-century Luddites, but they are nonetheless associated with significant job insecurity.

Finally, classical economists, who battled the rear guard of mercantilism in their days, would certainly recognize the assault on their paradigm in the anti-capitalist, anti-free-trade rhetoric currently prevalent in some contemporary discourse.

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Yet, with all of today's economic shortcomings, there can be little doubt that the Industrial Revolution and the emergence of free-market capitalism have brought civilization to a material level that could not have been imagined two centuries ago. The late eighteenth century, when the dramatic rise in standards of living and in population began after millennia of virtual stagnation, was one of the seminal turning points of history.

With few exceptions, that advance has carried forward to this day. Average global real per capita GDP has risen 1.2 percent annually since 1820, enough to double standards of living every fifty-eight years. In the same period, world population has increased sixfold. In the previous two millennia average per capita incomes barely exceeded levels required to support, at minimum subsistence, a marginally noticeable rise in population.

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Today, Adam Smith's insights still resonate as they did after the publication of the *Wealth of Nations*. However, during the intervening generations the esteem in which Smith's contributions were held waxed and waned with the acceptance of free-market capitalism.

After its initial acceptance in the late eighteenth century, the new economic order soon

attracted criticism. The Industrial Revolution brought "the dark Satanic mills" and all the squalor associated with them. To be sure, life for a significant part of the population at the margin of subsistence during the early days of the Industrial Revolution was misery. But it was life. A half-century earlier, many of those miserable souls would have died as infants or children. Nonetheless, within decades of the emergence of the new order the visible misery and the evident wretched struggle for subsistence inspired competing visions of economic organization.

Robert Owen, a successful British factory owner, in a challenge to Smith, averred that unrestrained laissez-faire by its nature would lead to poverty and disease. He led a school of so-called Utopian Socialists who advocated, in Owen's phrase, "villages of cooperation." In 1826, he set up such a community in the United States, which he named New Harmony. Ironically, communal strife brought the New Harmony experiment to collapse within two years. Many saw the initiative as opposed to the laws of human nature, a component of natural law.

But Owen's charismatic devotion to his cause continued to draw large followings among those barely able to eke out subsistence in an appalling working environment. The elevation to a more civilized state of work was still a century in the future.

Karl Marx was dismissive of Owen and his utopian followers. Indeed, Marx was attracted to the intellectual rigor of Smith and Ricardo, who to his mind, up to a point, accurately described the evolution of capitalism. As we all know, Marx viewed capitalism as a transition to the inevitable emergence of communism.

Unlike Marx, the Fabian socialists who emerged in the last decades of the nineteenth century advocated evolution rather than revolution to a more collectivized economy. Indeed, many of the restraints on laissez-faire advanced by the Fabians and other reformers were eventually enacted into law.

However, throughout the nineteenth century, notwithstanding widespread criticism of

market capitalism, standards of living continued to increase, propelling the world's population to more than 1-1/2 billion by 1900. The major advances in life expectancy by the early twentieth century were attributable largely to efforts to ensure a clean water supply, the result of the increased capital stock associated with rising affluence.

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In the nineteenth century, criticism of capitalism emphasized abuses of business practice. Aside from Marxist views of the exploitation of workers by capitalists, monopoly was seen by many as a natural consequence of unfettered capitalism. Even earlier, Smith had weighed in with his oft-quoted insight that "people of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."⁶

Yet standards of living of the average worker moved inexorably higher, serving through most of the nineteenth and early twentieth centuries as an effective political buffer to the widespread emergence of socialism. Because agriculture so dominated the world's economies at that time, the industrial recessions, which appeared from time to time, did not provoke a severe enough political response to alter the capitalistic order.

The writings of Jean Baptiste Say, an early nineteenth-century follower of Smith, were significant in this regard. He postulated that supply creates its own demand and concluded that marked contractions in economic activity would, with time, be unwound.⁷ The widespread acceptance of Say's Law and the associated confidence in the self-stabilizing property of a market-based price system were dominant factors inhibiting government intervention in periods of economic distress, especially during the latter part of the nineteenth and early twentieth centuries.

⁶Ibid., p. 10.

⁷J.B. Say, *Traité d'économie politique*, 1803.

But the Great Depression of the 1930s subjected the optimistic conclusions of classical economics, especially Say's Law, to a much broader assault. As the economic stagnation of the 1930s dragged on, the critical notion that capitalism was self-correcting fell into disrepute.

The marked increase in government intervention into markets, in effect a partial reversion to mercantilism, was perhaps an inevitable response to the distress of the Great Depression. At the same time, the notions of Marx gained influence in the West, perhaps because the repressions of the Soviet Union, the major avowed practitioner of Marx, were not well known before World War II.

But cracks in the facade of economic management by government emerged early in the post-World War II years, and those cracks were to widen as time passed. Britain's heavily controlled economy, a carryover from the war, was under persistent stress as it encountered one crisis after another in the early postwar decades. In the United States, unbalanced macroeconomic policies led to a gradual uptrend in the rate of inflation in the 1960s. The imposition of wage and price controls to deal with rising inflation in the 1970s proved ineffective and unworkable. The notion that the centrally planned Soviet economy was catching up with the West was, by the early 1980s, increasingly viewed as dubious, though the view was not fully discredited until the collapse of the Berlin Wall in 1989 exposed the economic ruin behind the Iron Curtain.

The East-West divisions following World War II engendered an unintended four-decade-long experiment in comparative economic systems--Smith versus Marx, so to speak. The results, evident with the dismantling of the Iron Curtain, were unequivocally in favor of market economies. The consequences were far-reaching. The long-standing debate between the virtues of economies organized around free markets and those governed by central planning came to an end. There was no eulogy for central planning; it just ceased to be mentioned, leaving the principles of Adam Smith and his followers, revised only in the details, as the seemingly sole remaining effective paradigm for economic organization. A large

majority of developing nations quietly shifted to more market-oriented economies.

But even earlier in the postwar decades, distortions induced by regulation were viewed as more and more disturbing in the developed world. Starting in the 1970s, American Presidents, supported by bipartisan majorities in the Congress, deregulated large segments of America's transportation, communications, energy, and financial services industries. Similar initiatives were advanced in Britain and elsewhere. The stated purpose was to enhance competition, which following Adam Smith was increasingly seen as a significant spur to the growth of productivity and standards of living. The slow, but persistent, lowering of barriers to cross-border trade and finance assisted in the dismantling of economic rigidities.

By the 1980s, the success of that strategy in the United States confirmed the earlier views that a loosening of regulatory restraint on business would improve the flexibility of our economies. Flexibility implies a faster response to shocks, a correspondingly greater ability to absorb their downside consequences, and a quicker recovery in their aftermath. Enhanced flexibility has the advantage of enabling market economies to adjust automatically and not having to rest on policymakers' initiatives, which often come too late or are misguided. Such views, which echo Jean Baptiste Say in some ways, clearly have been paramount in a renewed twenty-first century appreciation of Adam Smith's contributions.

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Classical economics, especially as refined and formalized by Ricardo and Alfred Marshall, emphasized competition in the marketplace among economic participants governed by rational self-interest.⁸ The value preferences of these participants would be revealed by their actions in that marketplace. But the ultimate source of value preference was assumed to be outside the scope of economics.

Adam Smith's purview was broader: He sought in his *Theory of Moral Sentiments*,

⁸A. Marshall, *Principles of Economics*, 1890.

published nearly two decades before the *Wealth of Nations*, to delve into the roots of human motivation and interaction. He concluded that human sympathy, by fostering the institutions supporting human civil interaction and life, was a major contributor to societal cohesion.

To guide their own lives, people also exhibit a seeming inborn sense of right and wrong, presumably tested by the laws of nature. Those sentiments fashion each person's value preferences and their intensity. Rational thought, in Smith's thesis, apparently emerges only in the contemplation and initiation of those actions that will make manifest the innate propensities.

Over the past two centuries, scholars have examined these issues extensively, but our knowledge of the source of inbred value preference remains importantly shaped by the debates that engaged the Enlightenment. The vast majority of economic decisions today fit those earlier presumptions of individuals acting more or less in their rational self-interest. Were it otherwise, economic variables would fluctuate more than we observe in markets at most times. Indeed, without the presumption of rational self-interest, the supply and demand curves of classical economics might not intersect, eliminating the possibility of market-determined prices. For example, one could hardly imagine that today's awesome array of international transactions would produce the relative economic stability that we experience daily if they were not led by some international version of Smith's invisible hand.

The inference is not that people always act rationally in commercial transactions. The periodic bubbles in product and financial markets prove otherwise. But, by and large, the description of economic process that Smith developed, and others have since extended, does appear to adequately describe today's determinants of world commerce and the wealth of nations.

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A notable aspect of economics as a major discipline is its emergence largely on British soil. Smith, Ricardo, Mill, Marshall, and Keynes developed and extended classical economics.

Even Marx constructed much of his revolutionary thesis in London. The incredible insights of a handful of intellectuals of the Enlightenment--especially the Scottish Enlightenment, with Smith and Hume toiling in the environs of Kirkcaldy--created the modern vision of people free to choose and to act according to their individual self-interest. As a consequence, today we enjoy material benefits and longevity that Smith's generation could not have remotely imagined. We owe them, especially Adam Smith, a debt of gratitude that can never be repaid.