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## **The Wealth of Nations: Talent, Competitiveness, Prosperity**

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The themes of this conference are talent, competitiveness, and prosperity. No company can be competitive in the global economy without talent. And no country can be prosperous without companies that are competitive. But where does talent come from, how is it transformed into competitive products, and under what conditions do competitive products translate into “sustainable prosperity”—that is, stable and equitable economic growth?

My talk today will provide some answers to these questions from the perspective of what I call “the theory of innovative enterprise.” This perspective is very different than the one that a conventional free-market economist would offer. I am an economist, but one who argues that in a prosperous economy, *well-developed markets in land, labor, finance, and products are outcomes, not causes, of the wealth of nations*. Markets must be regulated, or they will undermine the competitiveness of business organizations and the prosperity of nations. The innovative enterprise is a social organization that shapes market forces to generate the high-quality, low-cost products that make it competitive and that contribute to national prosperity.

Let’s take a look at the arguments on talent, competitiveness, and prosperity that Adam Smith made 240 years ago in one of the classics of economics, *An Inquiry into the Nature and Causes of the Wealth of Nations*. Smith is credited with arguing that an economy in which individual self-interest directed by an “invisible hand” determines the allocation of resources results in the highest common good. Or as Smith put it in his only use of the phrase “the invisible hand” in *The Wealth of Nations*, “by directing that industry in such a manner as its produce may be of the greatest value, he [an enterprising individual] intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.”

But how does an enterprising individual direct an “industry in such a manner as its produce may be of the greatest value”? He or she has to have “talent,” i.e., productive capabilities that can be used to produce the high-quality, low-cost goods or services that are of

“the greatest value.”. In Smith’s time, formal education played a relatively insignificant role in developing the talent for industrial pursuits. Much more important for accumulating talent was work experience in particular industries. The enterprising—and talented—individual could then implement and integrate “a division of labor” (as Smith put it) of specialized but interdependent tasks to generate products that could capture the “extent of the market.”

The greater the extent of the market, the more opportunity for specializing labor in defined tasks with the capitalist employer acting as what we would today call the “systems integrator” of components into a final product for sale on the market. The larger the extent of the market, the greater the “economies of scale”? *The Wealth of Nations* was an argument for dismantling the mercantilist institutions that the British nation had built up over the previous 200 years, with large joint-stock monopolies such as the East India Company, Royal African Company, and Hudson’s Bay Company as central actors. Yet it was this business system, linked with protectionist policies based on national power—Britain defeated the Spanish in the 16<sup>th</sup> century, the Dutch in the 17<sup>th</sup> century, and the French in the 18<sup>th</sup> century—that, by the time Smith was writing, placed global markets under British political and military control. If, as Smith argued, the extent of the market was the key to raising productivity through division of labor, then enterprising individuals located in Britain benefited from Britain’s national power that gave them privileged access to the extent of the market on a global scale.

In 1841, by which time the industrial revolution that occurred in the 60 years after the appearance of *The Wealth of Nations* had greatly increased Britain’s wealth, the German economist Friedrich List argued in *The National System of Political Economy* that Britain’s ideology of Smithian free trade was meant to prevent Germany from achieving the competitiveness and prosperity that industrial development had brought to Britain. As List said, “it is a very common clever device that when anyone has attained the summit of greatness, he kicks away the ladder by which he climbed up, in order to deprive others of the means of climbing up after him.” Drawing inspiration from Alexander Hamilton, a founding father of the United States, who published his *Report on the Subject of Manufactures* in 1790, and Daniel Raymond, a U.S. economist with publications in the 1820s, List articulated the “infant-industry” argument for tariff protection. This argument posits that it requires time for a manufacturing

industry in a less-developed nation to attain the productivity levels of one in an already developed nation. To permit this “growing-up” process to take place, the less-developed nation must give its domestic industry privileged access to the domestic market. Indeed, a national manufacturing industry that engages in learning with the benefit of protected markets may go beyond merely imitation of the production methods of the world leader to engage in “indigenous innovation” so that, once the learning has been done, the less-developed nation has a higher quality, lower cost product that is a source of distinct competitive advantage on global markets.

In Britain’s rise to the status of “workshop of the world” in the late 19<sup>th</sup> century, the nation engaged in a particular type of learning that focused on skilled craft workers manufacturing with as yet quite imperfect machines. The accumulation of talent came from senior, more experienced, shop-floor workers training junior, neophyte, shop-floor workers to get high productivity out of the production machinery available. In the British industrial districts in which this apprenticed talent accumulated, British manufactured goods outcompeted the rest of the world, even as by the last decades of the 19<sup>th</sup> century, British production workers shared in this productivity through more stable employment and higher wages. In *Principles of Economics*, first published in 1890 and then reissued in seven revised editions through 1920, the British economist Alfred Marshall described the dynamics of talent accumulation in British industrial districts:

“When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow

up in the neighbourhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material.”

Marshall observed that accompanying this process of talent accumulation in late 19<sup>th</sup> century Britain was a proliferation of small firms clustered in industrial districts, and he welcomed this shared prosperity as morally superior to the concentration of talent in a few large companies that dominated an industry. Yet he recognized that it was possible, through the accumulation of talent, for a single firm to grow large and dominant. In *Principles of Economics*, Marshall provides a succinct analysis of the process by which “an able man, assisted by some strokes of good fortune” can build superior capabilities to the point at which “the increase in the scale of his business increases rapidly the advantages which he has over his competitors, and lowers the price at which he can afford to sell.” Marshall recognized that if these internal economies of scale could persist long enough, then the firm could come to dominate its industry, but only, in his view, if the concentration process “could endure for a hundred years.” Long before that, Marshall argued, the firm’s superior capabilities would be dissipated. Invoking the aphorism “shirtsleeves to shirtsleeves in three generations,” Marshall doubted that the energy and creativity—that is, the talent—of the founder of the firm can be sustained by his familial successors, and hence, like trees in the forest, older firms will die and newer firms will take their place. In Marshall’s view, the growth of the firm is limited by the ability of successive generations of family owners to have the talent to manage it.

However, as Marshall was revising his *Principles of Economics* between 1890 and 1920, international competition was changing, especially in the science-based electrical and chemical industries, as firms grew to enormous size and power in nations such as Germany and the United States. These transformations are thoroughly documented in the works of business historian Alfred Chandler, especially in his books *The Visible Hand: The Managerial Revolution in American Business*, published in 1977, and *Scale and Scope: The Dynamics of Industrial Capitalism*, comparing Britain, United States, and Germany, published in 1990.

Chandler documents in *The Visible Hand*, that by the 1920s in industries that were both knowledge-intensive and capital-intensive “the managerial revolution in American business” (to quote the book’s subtitle) was complete. Through a process of public listing on the stock

market that separated share ownership and managerial control, professional salaried managers had replaced owner-entrepreneurs as strategic decision-makers in major U.S. business corporations. The separation of ownership from control that occurred in U.S. industrial enterprises at the turn of the 20th century enhanced the managerial capabilities of dominant firms. When these companies went public, they already had in place powerful managerial organizations that enabled salaried executives to take over strategic control from the retiring owner-entrepreneurs. By reducing the possibility of nepotism in top-management succession, the removal of proprietary control opened up new opportunities for upward mobility for career managers that helped to ensure the commitment of these managers to the long-run productive performance of their particular firms. Not coincidentally, the first decades of the 20th century also saw the dramatic transformation of the U.S. system of higher education away from the elite British model with its aristocratic pretensions—which were impeding the development of managerial capabilities in Britain—to one that serviced the growing needs of U.S. industrial corporations for professional, technical, and administrative personnel.

From the perspective of sustained industrial innovation, therefore, the key enabler of the successful separation of share ownership from managerial control in the United States was the building of managerial capabilities for the development and utilization of productive resources. The growth of the managerial enterprise enhanced the access of these firms to committed finance, rooted in retained earnings and supplemented by bond issues, to fund investments in organization and technology. The managerial revolution in American business was a powerful engine of economic growth, especially in corporations that invested in deep technological capabilities. Even in the Great Depression of the 1930s, when, for lack of product demand, major industrial corporations laid off production workers, they continued to invest in their research capabilities, expanding employment of scientists and engineers. More generally, in the post-World War II decades, in order to train and retain talent, major U.S. companies adopted the employment norm of a career-with-one-company. These investments in productive capabilities enabled U.S. industrial corporations to be integral to what in 1961 President Dwight Eisenhower would call the “military-industrial complex.”

From the 1960s, however, largely as a result of the microelectronics revolution, high-tech startup firms appeared. As startups with highly uncertain futures, these “New Economy” companies could not offer professional, technical, and administrative employees a career with one company, the employment norm that prevailed at established Old Economy companies. But to induce personnel to leave secure employment at Old Economy companies, the New Economy startups could offer them stock options that could become very valuable if and when the young company could list on the stock exchange. These startups could also attract finance from venture capitalists, induced by the prospect of doing a quick initial public offering (IPO) on the speculative NASDAQ exchange that had been launched in 1971.

One company that did a quick IPO was Intel, founded by Gordon Moore and Robert Noyce in 1968 and listed on NASDAQ in 1971. In the mid-1990s Moore exposed a myth about the innovative capabilities of high-tech startups:

“Running with the ideas that big companies can only lope along with has come to be the acknowledged role of the spin-off, or start-up. Note, however, that it is important to distinguish here between exploitation and creation. It is often said that start-ups are better at creating new things. They are not; they are better at *exploiting* them. Successful start-ups almost always begin with an idea that has ripened in the research organization of a large company. Lose the large companies, or research organizations of large companies, and start-ups disappear.”

Yet, the competition for talent by startups was itself a powerful force contributing to the demise in the 1990s of the corporate research labs that had been a characteristic feature of leading Old Economy technology companies. More generally, when key corporate employees can use hypermobile labor markets to change jobs for their own personal benefit, they often undermine the collective and cumulative innovation processes in the companies that they have left behind.

But in the United States over the past quarter century, the disruption of the development and utilization of talent in the established companies has gone much further, in the name of a highly destructive ideology of corporate-resource allocation known as “maximizing shareholder value.” MSV ideology is rooted in two misconceptions of the role of

public shareholders in the U.S. business corporation. The most fundamental error is the assumption that public shareholders invest in the productive assets of the corporation. That error is then compounded by the assumption that it is *only* public shareholders who make risky investments in the corporation's productive assets, and hence that it is only shareholders who have a claim on the corporation's profits if and when they occur. Once we recognize the flaws in these assumptions concerning investment in productive capabilities and risk-taking, the factual foundation for MSV ideology falls apart. Central to the MSV argument is the assumption that, of all participants in the business corporation, shareholders are the only economic actors who make productive contributions *without a guaranteed return*. All other participants such as creditors, workers, suppliers, and distributors allegedly receive a market-determined price for the goods or services that they render to the corporation, and hence take no risk of whether the company makes or loses money. On this assumption, only shareholders have an economically justifiable claim to the "residual" of revenues over costs after the company has paid all other stakeholders their guaranteed contractual claims for their productive contributions to the firm.

By the MSV argument, shareholders are the only stakeholders who need to be incentivized to bear the risk of investing in productive resources that may result in superior economic performance. As the only "residual claimants," the MSV story goes, shareholders are the only stakeholders who have an interest in monitoring managers to ensure that they allocate resources efficiently. Furthermore, by buying and selling corporate shares on the stock market, public shareholders, it is argued, can directly reallocate resources to uses that are more efficient than investments within the corporation.

These assumptions are incorrect. Through government investments and subsidies, *taxpayers* regularly provide productive resources to companies without a guaranteed return. As an important example, but only one of many, the 2016 budget of the U.S. National Institutes of Health (NIH) is \$32.3 billion, with a total NIH investment in life-sciences research from 1938 through 2015 of \$958 billion in 2015 dollars. Businesses that make use of life-sciences research benefit from the public knowledge that the NIH generates. As risk bearers, taxpayers who fund such investments in the knowledge base, or physical infrastructure such as roads, have a claim

on corporate profits if and when they are generated. Through the tax system, governments, representing households as taxpayers, seek to extract this return from corporations that reap the rewards of government spending. However, tax revenues on the prospective gains from innovation depend on the success of innovative enterprise while, through the political process, tax rates on those gains are subject to change. Hence, for both economic and political reasons, the returns to taxpayers whose money has been invested for the benefit of business enterprises are by no means guaranteed.

Workers regularly make productive contributions to the companies for which they work through the exercise of skill and effort beyond those levels required to lay claim to their current pay, but without guaranteed returns. Any employer who is seeking to generate a higher-quality, lower-cost product knows the profound productivity difference between employees who just punch the clock to get their daily pay and those who engage in learning to make productive contributions through which they can build their careers and thereby reap future returns in work and in retirement. Yet these careers and the returns that they can generate are not guaranteed.

As risk bearers, therefore, taxpayers whose money supports business enterprises and workers whose efforts generate productivity improvements have claims on corporate profits if and when they occur. MSV ignores the risk-reward relation for these two types of economic actors in the operation and performance of business corporations. Instead it erroneously assumes that shareholders are the only residual claimants.

The irony of MSV is that the public shareholders whom it holds up as the only risk bearers typically never invest in the value-creating capabilities of the company at all. Rather, they purchase outstanding corporate equities with the expectation that while they are holding the shares dividend income will be forthcoming and with the hope that when they decide to sell the shares the stock-market price will have risen to yield a capital gain. Following the directives of MSV, a prime way in which the executives who control corporate resource allocation fuel this hope is by allocating corporate cash to repurchasing the company's own stock on the open market to pump up their company's stock price.

In the United States, over the decade 2006-2015 net equity issues of nonfinancial corporations averaged *minus \$416 billion per year*. The 459 companies in the S&P 500 Index in January 2016 that were publicly listed over that ten-year period expended \$3.9 trillion on stock buybacks, representing 53.6 percent of net income, plus another 36.7 percent of net income on dividends. Much of the remaining 9.7 percent of profits was held abroad, sheltered from U.S. taxes.

Why do companies do stock buybacks? As I explain in a 2014 *Harvard Business Review* article, “Profits Without Prosperity: Stock Buybacks Manipulate the Market and Leave Most Americans Worse Off,” companies do buybacks because the stock-based pay of senior executives incentivizes them to use corporate cash to give manipulate boosts to the company’s stock price. Senior executives “disgorge” this cash flow, not for the sake of efficient resource allocation, but rather for the sake of increasing their own stock-based pay. The average total compensation of the 500 highest-paid executives in the United States for each year from 2006 through 2015 ranged from a low of \$15.9 million in 2009, when the stock markets had crashed, with stock-based pay (realized gains from stock options and stock awards) making up 60 percent of the total, to a high of \$32.6 million in 2015, with stock-based gains making up 82 percent of the total.

Stock buybacks have contributed at the same time to the concentration of income among the richest 0.1% of U.S. households and the erosion of middle-class employment opportunities for most of the U.S. population over the past three decades. Although a company such as IBM, Microsoft, or Exxon Mobil that has attained a dominant market position can do tens of billions of dollars in buybacks over the years and remain in business, this mode of resource allocation erodes their competitiveness. Sustainable prosperity—that is, stable and equitable economic growth—requires a nation’s business enterprises to be engaged in *value creation*. The ideology of maximizing shareholder value that has dominated corporate resource allocation in the United States since the mid-1980s empowers senior corporate executives, often in league with hedge-fund managers and investment bankers, to engage in *value extraction* that erodes investment in talent, saps a company’s competitiveness, and results in

prosperity only for those at the top. Europe, and Slovenia within it, has much better business models upon to develop talent, attain competitiveness, and ensure widely-shared prosperity.