BRIEFLY NOTED

Is It Finally Time for Narrow Banking?

BY PAUL E. GODEK

The idea of narrow banking has been around at least since the Great Depression, which is not a coincidence. Narrow banking, also known as 100 percent reserve banking, stands in opposition to our current system of fractional reserve banking. Given the recent tumult in the U.S. banking sector, along with the uncertain extent of federal deposit insurance, this is a good time to review the merits of narrow banking.

Currently, banks are required to keep only a small fraction of their deposits as "reserves" with the central government bank, the Federal Reserve. Banks are free (though subject to voluminous regulations) to loan out and otherwise invest the rest of their deposits. Hence, the system is known as fractional reserve banking. (The regulations are there to prevent banks from taking excessive risks with depositors' money, which sometimes works, sometimes doesn't, but more on that below.) Narrow banks, in contrast, would keep all deposits at the Federal Reserve or invested in short-term U.S. Treasury bills.

Unstable and hazardous / Banks are said to be in the inherently unstable situation of borrowing short (from depositors, who can withdraw their money at any time) and lending long (to borrowers for mortgages, auto loans, business loans, etc., who pay back the loans over long periods). The inherent instability of this system is on display whenever there is a bank run, or a series of bank runs (also known as a banking crisis or the medical-sounding "systemic contagion"), or even in the perennial Christmas movie *It's A Wonderful Life*, in which a bank run plays a supporting role.

To reassure depositors and prevent bank runs, the federal government insures bank deposits up to some specified maximum per account. But that still leaves us with at least three problems:

First, deposit insurance encourages banks to take excessive risks with depositors' money because bailouts will happen if too many loans turn sour. Heads the bank wins, tails the federal government bails out depositors. That's where the term "moral hazard" comes in. Economists use the term to describe what happens when you have more insurance than you ought to have, given how insurance can affect your attitude toward risk-taking.

Second, many depositors have balances at banks far greater than the insured maximum. Why would that be? In part, because of the next problem.

Third, the federal government sometimes insures bank deposits beyond the specified maximum, depending on such circumstances as the size of the bank (i.e., whether it is "too big to fail"), the risk of follow-on bank runs (systemic contagion again), whether uninsured depositors are too politically connected to fail, and the whims of officials in charge. What are the limits of deposit insurance? At this point, nobody knows. But the implicit guarantee of virtually all bank deposits, at least for the time being, has become a massive potential liability and an encouragement to reckless behavior.

With fractional reserves and uncertain amounts of deposit insurance, instability and moral hazard ensue.

Narrowness solves the problem / The collapse of the U.S. banking system in the 1930s led some economists to make the case for narrow banking, a system that requires banks to hold 100 percent of their deposits on reserve. All deposits are thereby 100 percent guaranteed, without risk to the federal budget. There would be no bank runs and no need to regulate what banks do with depositors' money, beyond the 100 percent reserve requirement.

Some operational details: Banks, as banks, would provide only checking and saving services. As noted, banks could keep deposits at the Federal Reserve, which would pay banks the short-term Treasury bill rate as interest. Alternatively, they could hold short-term Treasury bills directly. And they could offer longer-term certificates of deposit backed by Treasury debt of the same duration. Competition would induce banks to pass the interest along to depositors, minus the cost of doing business.

Banks and other businesses could still make loans, as they do now, but that capital would be raised not from depositors, but from investors willing to bear the uninsured risks. Because banks currently provide a substantial

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portion of private sector debt, the transition to narrow banking would have to be gradual, over the course of a few years.

The academic interest in narrow banking is correlated with bank failures, but narrow banking is no fringe idea. It has a strong academic foundation, having been considered and endorsed by many prominent economists. One of the most coherent descriptions in support of narrow banking can be found—no surprise here—in Milton Friedman's 1959 book *A Program for Monetary Stability.*

New developments / By the way, the Federal Reserve began paying interest on reserves in 2008 (to soak up some of the vast increases in the money supply). Banks currently hold about one-fifth of their deposits on reserve or as Treasury bills. We are already one-fifth of the way to narrow banking!

Given the interest currently paid on reserves, as well as the ability of banks to invest deposits in Treasury bills, some might ask: why doesn't narrow banking arise on its own merits, without requirement? The reasons are straightforward. First, the payment of interest on reserves is an ad hoc policy that could be rescinded at any time. More importantly, deposit insurance is a massive subsidy. Under the current system, banks get very cheap insurance on a substantial share of deposits (and on all deposits if the bank is deemed too big to fail), and the banks get to loan out the money at rates higher than Treasury bills. Subsidized firms crowd out non-subsidized firms.

Another factor to consider is technology. People can transfer money via their laptops, cell phones, and other electronic devices. The recent run on Silicon Valley Bank was called the first "Twitter-fueled" bank run because of the app's role in spreading news about the bank's precarious status. Bad news travels faster than ever. All this technology may make banks more fragile, not less.

Given increasing instability and moral hazard, we are told, banks will have to be even more regulated. That's always been the preferred solution. Volume 12 of the *Code of Federal Regulations*, which deals exclusively with "Banks and Banking," runs to more than 9,000 pages, the equivalent of about eight Bibles (Old *and* New Testament).

Politicians and regulators claim to know what is needed: just a little more fine-tuning, a few thousand more pages of regulations, and the system will be, well, probably not much different than it is today, including the moral hazard and the arbitrary and uncertain federal guarantee of bank deposits. And, as banks become even more regulated, they will become even more subject to political pressure and manipulation. For instance, banks have increasingly been "advised" to not provide services to politically disfavored businesses. That's not a recipe for stability, soundness, and the efficient allocation of capital.

Is now the time? / Would narrow banking eliminate the tendency of the federal government to bail out institutions that should not be bailed out? Of course not, but it would take banks out of the bail-out-and-regulate sector. Would banks still fail? Some would, but because they were out-competed in the provision of services to customers, not because of risky loan portfolios and bank runs. In the narrow bank sector, inherent instability, moral hazard, and uninsured deposits would all be relegated to the dustbin of history.

Unfortunately, the idea of narrow banking has always been a non-starter for political reasons; banks derive much profit from the current arrangement. Nonetheless, with regulatory overload and expanding deposit insurance, we may be at an inflection point. Banks may finally see a benefit in splitting their deposit-taking business from their loan-making business. Perhaps now is the time to take a broader view of narrow banking. *R*

Against Taxing Corporate Stock Buybacks

BY RICHARD R. WEST AND JAMES A. LARGAY

Among the potpourri of tax increases in President Biden's 2024 budget is a proposal to raise the nondeductible excise tax on corporate stock buybacks from 1 to 4 percent. Many proponents, including Sens. Charles Schumer (D–NY) and Bernie Sanders (I–VT), claim their primary objective is not to raise revenue but to encourage companies to invest more in plant, equipment, and research and development. Their basic premise—that the alternative to buying back stock is to reinvest the funds in company operations—and other criticisms of buybacks reflect misunderstanding of the role played by share repurchases in corporate activities. Once that role is properly understood, the case for taxing buybacks vanishes.

Corporate investment unaffected / Firms exist to determine what businesses to be in, how much to invest in them, and how to finance their activities. Having made these decisions, they then consider whether, how, and when to distribute cash to their shareholders, either by paying dividends or buying back stock. Corporate investment decisions therefore affect distributions to shareholders, including buybacks—not the other way around. Tamping down buybacks, by taxes or other means, does not magically create profitable investment opportunities. Misunderstanding this is why some buyback critics mistakenly claim

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that buybacks starve firms of investment capital.

While those who mistakenly argue that stock repurchases starve companies of investment capital have played the leading role in the campaign to regulate them, they are hardly alone in their opposition. In addition, critics assert that buybacks are bad because they are used to manipulate earnings, inflate executive compensation, and provide a basis for a form of insider trading. On examination, however, none of those claims are any more persuasive than the notion that buybacks take away funds from productive corporate investment activities.

Earnings per share concerns / There are other criticisms of buybacks. One is that buybacks improperly manipulate earnings. Repurchasing stock increases all per-share metrics, notably earnings per share (EPS). But an important 2016 study by McKinsey & Co. concluded that "the mechanical effect (of share repurchases) on EPS is totally irrelevant." To quote the study, "While improving a company's EPS can improve the return to shareholders, the contribution of share repurchases is virtually nil." Other studies reached the same conclusion: there is no empirical evidence of a positive correlation between stock buyback activities and total returns to shareholders. As the McKinsey study succinctly concludes: "It's the generation of cash flow that creates value, regardless of how that cash is distributed to shareholders. So share repurchases are just a reflection of how much cash flow a company generates."

Executive compensation fears / Another criticism is that buybacks can be used to inflate executive compensation. According to Schumer, stock repurchases are "one of the most self-serving things that corporate America does." The apparent reasoning behind this claim suggests that the above-discussed "mechanical effect" on EPS allows companies to use buybacks to achieve EPS targets that raise executive compensation.

Although theoretically possible, the processes of determining high-level corporate pay packages are more sophisticated than that. Boards of directors and their compensation consultants can easily identify differences in EPS resulting from buyback activities. Moreover, the growing involvement of major institutional investors in monitoring corporate governance quality virtually guarantees that they do so. The empirical evidence is clear: managements of companies that regularly use buybacks do not earn more, on average, than executives of comparable firms that eschew buybacks.

Stock price manipulations / There is also the criticism that buybacks can be used to engage in manipulative stock trading activities. The typical argument is not that managers personally employ insider information for their own benefit, but that they use it to make corporate stock buybacks when they "know" their company's stock is "cheap" and take advantage of selling shareholders.

Although major buyback programs can be accompanied by press releases about why a company's shares are "undervalued," the empirical evidence does not give managements high marks for buying back stock "on the cheap." The opposite is closer to the truth: as the above-mentioned McKinsey study noted, "Most companies do not time their purchases well." Also, it is important to remember that selling shareholders do so voluntarily.

Wall Street Journal columnist Jason Zweig criticized buyback activities because companies have repurchased substantial amounts of stock shortly before getting into serious trouble. He specifically cited Bed Bath and Beyond, which purchased more than $11 billion of stock in recent years, and now has filed for Chapter 11 bankruptcy. But a case can be made that such buybacks were very timely because they distributed cash to shareholders rather than reinvesting it in a declining business. Yet the track record for the timing of buybacks is hardly evidence that managements have taken advantage of selling shareholders.

Additionally, the public policy position on the matter of seeing buybacks as some form of insider trading is clear. Ever since the Reagan administration, corporate stock buybacks have enjoyed a "safe harbor" from charges of insider activity.

Buybacks vs. special dividends / We now return to where we started, recognizing that stock buybacks are one way for companies to distribute cash to shareholders. The other way is to pay dividends. Both involve debiting the company's capital accounts and crediting cash. But there is no change in the company's operating assets or their financing; the "corporate pie" remains the same, except for the number of pieces into which it is divided and who owns them.

The relevant questions are when and why companies choose to pay dividends or buy back stock. To begin, note that buybacks have never been seen as a general alternative to paying regular quarterly dividends. Even when the tax laws made buybacks more tax advantageous to shareholders than they are today, regular dividends flourished.

The reason for this is that many investors have strong preferences for stable, predictable cash flow streams. Corporate dividend policies—as an important example of the so-called "clientele effect"—have reflected this preference for many decades. Companies are very reluctant to cut regular dividends and firms with a long record of annual dividend increases are well-known as "dividend aristocrats." In 2022, buybacks exceeded $1.2 trillion, whereas regular dividend payments exceeded $1.7 trillion.

Instead, buybacks are seen as akin to paying "special" dividends. Both deal with nonroutine situations such as selling an operation, changing capital structures, dealing with highly cyclical operating results, or distributing a massive cash hoard accumulated over time. Apple's buybacks of the past decade likely illustrate the last of these. Neither buybacks nor special dividends create an expecta-

tion of continuing payments or emit false signals about the future course of regular dividends.

Obviously, an excise tax on stock buybacks forces companies to reconsider their use. The Congressional Joint Economic Committee estimated that the current 1 percent tax will raise about $78 billion over the next decade, implying that the committee still expects total buybacks to exceed $7 trillion during this period. No doubt this is why there is a proposal to increase the tax to 4 percent.

Should firms continue to buy back stock and pay the tax? If not, how should they deal with the excess cash they distributed via buybacks?

Two questions present themselves from a company's perspective: First, should the firm continue buying back stock and paying the associated tax? Second, if buybacks are out, how should the firm deal with the excess cash that had previously been distributed via buybacks? We have no way to know how any given company might answer the first question, other than to say what is obvious: the higher the tax, the greater the likelihood that it will decide to eschew buybacks.

As for the second question, it seems clear that simply retaining the cash is not a viable way to proceed. Because the funds involved were being distributed precisely because they were deemed to be excessive, retaining them just creates a greater need for a larger distribution sometime in the future.

Some companies will tweak their regular dividend policies to absorb a portion of the excess cash. But taking this approach runs the very real risk of sending false signals to shareholders about the future course of regular dividends. Regular dividends are just that; funds for buying back stock are nonroutine distributions. Combining the two reminds us of the old saw about trying to mix oil with water.

By a process of elimination, then, we conclude that most companies seeking to save tax money by reducing or eliminating buybacks will end up increasing their use of special dividends. Like buybacks, special dividends avoid sending false signals to shareholders and can be turned on and off at will.

Unfortunately, the taxation of funds distributed as special dividends is exceedingly complex. Depending on the circumstances, they can be taxed as ordinary income, capital gains, a return of capital, or in many cases some combination of all three.

Without taxes on buybacks, companies were incentivized to decide between repurchasing shares and paying special dividends principally on the basis of which of the two produced the best after-tax results for shareholders. What companies have done over the years clearly indicates that in the majority of circumstances the tax consequences for shareholders were better when shares are repurchased.

More government revenue, not more corporate investment / Imposing the excise tax therefore means that (1) companies that continue buying back stock will be subject to added taxes, and (2) shareholders of companies deciding to use special dividends instead will likely be paying more taxes. Either way, taxing buybacks produces more revenue for government, while doing nothing to foster more corporate investment in plant, equipment, and R&D.

Implicit in all this is that taxing stock buybacks creates a conflict of interest between company managements and their shareholders. Will managements do what is best for their firms or what is best for their owners? Alas, there simply are no obvious answers to questions such as these.

The Apple case offers a dramatic example of the potential damage from a 4 percent excise tax on buybacks. Some 10 years ago, following a massive cash accumulation under Steve Jobs, Apple started both a modest quarterly dividend and an aggressive stock buyback program; the latter totaled around $90 billion in 2022. The proposed nondeductible 4 percent excise tax would have levied a $3.6 billion deadweight cost on the company and would likely have forced serious consideration of using special dividends to the detriment of shareholders.

Meanwhile, the empirical evidence indicates that neither buybacks nor cash used to pay regular or special dividends have negatively affected corporate investment activities. Princeton economist and legendary financial writer Burton Malkiel recently noted in the *Wall Street Journal* that a study of the period 2007–2017 found that "research and development and capital expenditures soared over the same period when shareholder payouts and buybacks were rising sharply."

The bottom line / In summary, stock buyback taxes are just another government interference with private sector decision-making, negatively affecting capital market efficiency without any offsetting economic benefits. Fortunately, the current composition of the House of Representatives makes it highly unlikely that a fourfold increase in the excise tax on buybacks will become law anytime soon. But a much better outcome is readily apparent: repeal the 1 percent tax as soon as possible. R

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BRIEFLY NOTED

Why the Great Enrichment Started in the West

BY PIERRE LEMIEUX

The term "Great Enrichment" is not a simple metaphor. According to Nobel-laureate economic historian Douglass North: "The process of sustained economic growth that historians believe began between 1750 and 1830 radically altered the manner and standard of living of Western men and women. … The Western world achieved a standard of living which had no counterpart in the past."

Why did the Industrial Revolution and the Great Enrichment start in the West and not elsewhere, like Asia? At least among economists and economic historians, the generally accepted explanation is that only Western countries developed the social, political, and economic institutions, including private property rights, favorable to individual liberty and prosperity. The 18th century Enlightenment was an important "cultural" ingredient. In economic historian Deirdre McCloskey's perspective, Western ideas allowed ordinary people to escape poverty and form a bourgeois middle class.

In a more elitist view than is usual in the classical liberal tradition, Spanish philosopher José Ortega noted that technological development in the West was accompanied by theoretical developments that made continuing progress possible. Ortega wrote:

> China reached a high degree of technique without in the least suspecting the existence of physics. It is only modern European technique that has a scientific basis, from which it derives its special character, its possibility of limitless progress.

China has arguably been the best representative of Eastern culture over more than two millennia. Many believe that, around the 13th century, Chinese technology was more advanced than its Western counterpart. Technologies and products such as silk, gun powder, the magnetic compass, papermaking, movable type, and porcelain were first invented in China, However, because the institutional and cultural factors mentioned above were lacking, innovations could not launch a cumulative movement of economic progress allowing the common people to escape poverty.

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Capitalism and enrichment / Anybody reading literature and testimonies from before the 19th century cannot but be impressed by the dire poverty of most people in most countries in that era. Some historians believe that the average standard of living started increasing slowly in the 16th century, but it was only in a few places (such as the Low Countries, comprised of modern-day Netherlands, Belgium, and Luxembourg) that a relatively prosperous middle class of merchants grew significantly. The establishment in that area of an efficient capital market by the end of the 16th century was especially momentous. North and Robert Paul Thomas note in their 1973 book *The Rise of the Western World* that the rate of interest on loans decreased from 20–30 percent at the beginning of the 16th century to 3 percent or less during the 17th.

Figure 1 shows estimates of real gross domestic product per capita in a few Western countries and China since the mid-18th century. GDP per capita, equivalent to income per person, is the best measure of the average standard of living. The data, first assembled by Angus Maddison of the University of Groningen in the Netherlands, go back to the year 1 AD. Except for a small increase starting around 1500, they show little or no increase in the standard of living. With the Great Enrichment, the standard of living soared—in the West.

A few explanations and caveats about these data must be kept in mind. Estimating GDP before its formal conception and construction in the 20th century must be done indirectly because of very partial historical records of prices and wages. The reliability of these estimates decreases as we move back in time. Following Maddison's passing in 2010, scholars involved with the Maddison Project have carried on his work. The data underlying Figure 1 are from the latest update (2020) of the Maddison Project database. In the figure, I used linear extrapolations to fill in missing data, with gaps often extending for long periods.

It may be objected that quantified estimates of GDP far in the past are so uncertain as to be useless. No doubt, we should be prudent in using them. However, the broad tendencies shown by the Maddison Project are consistent with other forms of historical evidence and can provide a way to summarize what we know. Moreover, as Maddison himself suggested: "Quantification clarifies issues which qualitative analysis leaves fuzzy. It is more readily contestable and likely to be contested."

The Maddison data from 1 AD onward suggest that the inhabitants of China and Western countries were more-or-less equally poor until the mid-18th century. But then, the West began to eclipse China. At the end of that century, real income per capita was more than three times higher in the United Kingdom than in China. In the 19th century, as the Industrial Revolution rolled on, the United Kingdom (along with the Netherlands, not included in the chart) moved ahead of China decisively. At the end of the 19th century, GDP per capita in the UK was nearly eight times that of China. In fact, China did not show serious signs of economic growth until the death of Mao Zedong in 1976. By that time, the factor of British eco-

nomic superiority was nearly 13. By imitating Western technology and opening to international trade, China then started its own Industrial Revolution.

Trade and colonialism / As often noted, economic take-offs take less time as more-developed countries can be imitated and traded with. The poor benefit from trading with the rich—and vice versa, of course. The same happened among Western countries after the UK and Netherlands spearheaded the original Industrial Revolution. Figure 1 shows that countries like Canada and Switzerland rapidly followed and surpassed the UK in the middle of the 20th century. From the first estimate we have for American GDP per capita in the mid-17th century, we see the country following British growth and overtaking the mother country at the end of the 19th century.

The trajectories of the United States, Canada, and Switzerland illustrate the general fact that colonialism is not necessary for a country's economic growth. British colonies likely did nothing to contribute to the metropole's Industrial Revolution. On the contrary, Adam Smith argued in *The Wealth of Nations* that colonies cost British taxpayers more than the uncertain benefits that the exclusive trade imposed on them may have brought. British restrictions on the American colonies' foreign trade retarded their growth. Protectionism is not conducive to economic growth.

The case of Spain, a major colonial empire from the 16th to the 19th century, is especially noteworthy. The metropole did not join the Industrial Revolution until after World War II. As North and Thomas note, "Despite the magnificence of their courts and their imperial ambitions, both France and Spain failed to keep pace with the Netherlands and England."

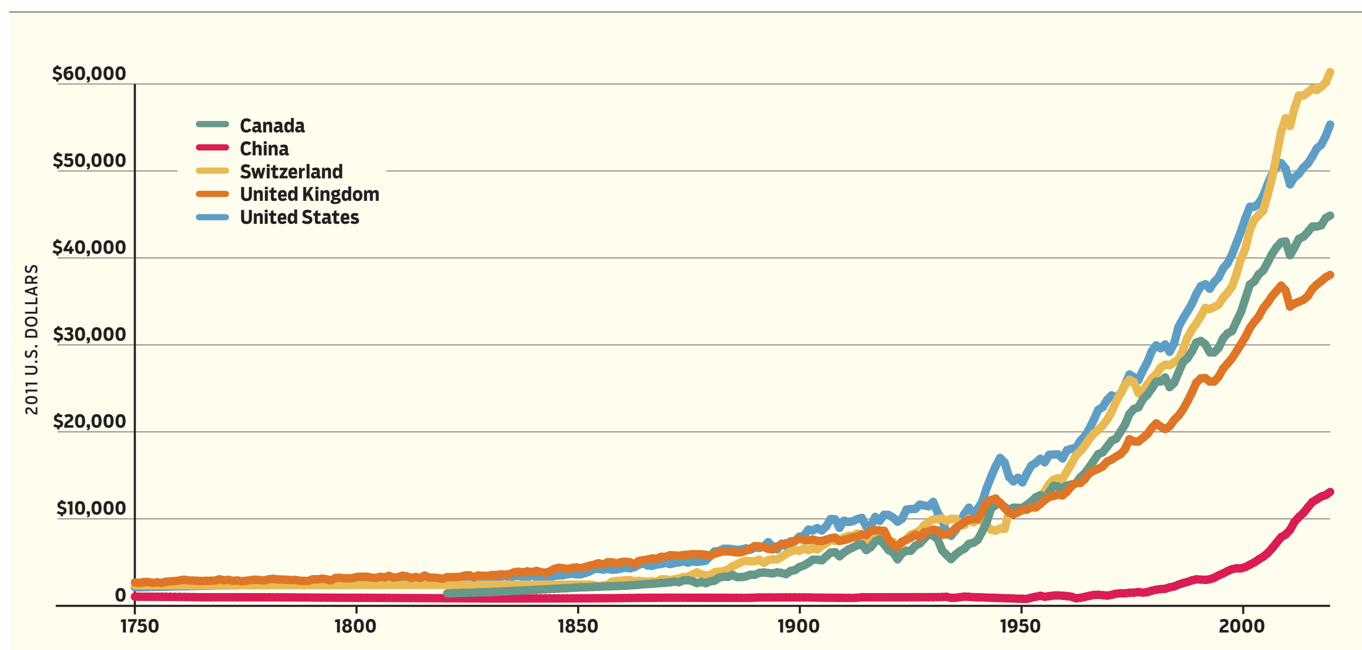
By 2018, GDP per capita was still much higher in the UK than in China, but by a factor of "only" 2.9. That closing of the gap is partly due to the Chinese economy's rapid growth in recent decades, and (it should be acknowledged) the UK economy has not been a model of Western growth in the past several decades. In 2018, U.S. GDP per capita was more than four times its Chinese equivalent. Viewed another way, the average Chinese citizen earns what the average American earned in 1941.

Openness, individual liberty, and institutions / The West became the West by being open to new ideas and to the world. In his 2016 book *A Culture of Growth*, Northwestern University economic historian Joel Mokyr notes "European willingness to adopt foreign techniques and products but also their total lack of coyness in doing so by explicitly naming products after their (supposed) origins," like "chinaware" or simply "china." (See "From the Republic of Letters to the Great Enrichment," Summer 2018.) On its side, China was crippled by the imperial regime's autarkic policies, as Stanford classicist Walter Scheidel argued in his 2019 book *Escape from Rome*, including bans on private foreign trade and the prohibition on construction and operation of large oceangoing ships. (See "Let's Travel that Road Again," Spring 2020.)

In contrast to Britain and continental Europe in 1750, Mokyr suggests that an Industrial Revolution was not in the cards for China:

Figure 1

Real GDP per Capita, 1750–2018



Note: Chart and linear extrapolations for missing data by author; see text.

Sources: Maddison Project Database, version 2020; "Maddison Style Estimates of the Evolution of the World Economy: A New 2020 Update," by Jutta Bolt and Jan Luiten van Zanden, Maddison Project, 2020. Sources for each country can be found at https://www.rug.nl/ggdc/historicaldevelopment/maddison/data/md2010_vertical.xlsx.

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> A free and open market for ideas, such as emerged in Europe in the sixteenth century, leading eventually to the Enlightenment and a cultural transformation that created a new set of attitudes toward useful knowledge did not develop in China.

If it is true that the institutions and accompanying morals that developed in the West are a necessary condition for continued economic progress and for the general welfare of ordinary people, it would follow that efforts to maintain them are important. The maintenance of liberal institutions is a special challenge because they rest on an ideal of individual liberty, which can relatively easily be used by those intent to subvert it or ignorant enough not to care. (See "An Enlightenment Thinker," Spring 2022.) But we should recognize the challenge and try to meet it.

Another implication relates to the developing countries in Asia and elsewhere. If the welfare of their inhabitants is to be served, those states should practice cultural appropriation and borrow from Western ideals and institutions. In the case of China, we should hope that its state will return to the opening that Deng Xiaoping encouraged following Mao's death, instead of continuing Xi Jinping's current backpedaling to authoritarianism. (See "Getting Rich Is Glorious," Winter 2012–2013.) In the West, we should make sure that our own governments don't intentionally hinder this process, nor embrace a similar backpedaling to pre-modern times. R

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Climate Damages, Globalism, and Federal Regulation

BY ARTHUR FRAAS, JOHN D. GRAHAM, KERRY KRUTILLA, RANDALL LUTTER, JASON SHOGREN, AND W. KIP VISCUSI

The U.S. Environmental Protection Agency recently proposed for public comment new higher estimates of damages from greenhouse gas (GHG) emissions. The estimates, called the social cost of carbon (SCC), are "the monetary value of the net harm to society of emitting a metric ton of carbon dioxide to the atmosphere in a given year." Ranging from \$120 to \$340 per metric ton of carbon dioxide (CO_2) emitted for 2020, these estimates represent harm to *everyone* on earth from a metric ton of CO_2 emissions, and therein lies a key issue. Recent administrations have split on whether the U.S. government should assess damages from GHGs using effects on the entire globe or just on the United States.

This question matters because the SCC plays a key role in implementing the Biden administration's ambitious plans to address climate change. The EPA and other agencies use the SCC to estimate benefits of climate and energy regulations, such as limits to power plant emissions or standards for vehicle fuel efficiency. Higher benefits estimates generally justify more costly regulations.

We believe that developing and reporting estimates of climate damages for *both* the United States and the entire globe would better inform the public than the global estimate alone, as the EPA has proposed. Both estimates should be used separately in calculations of benefits and costs of climate-related regulations and related policies.

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We agree with the EPA that the domestic SCC should not be the only measure of the SCC. As the EPA mentioned, an exclusive domestic focus would undermine U.S. policies that encourage global cooperation and would not capture the effects of climate change on supply chain disruptions that affect U.S. welfare or on U.S. business and military infrastructure abroad. Using the domestic SCC in addition to the global SCC would increase transparency about who receives the benefits, foster policy discussions about fairness and equity, furnish agencies with the flexibility to prepare analyses consistent with their statutory mandates, and provide important distributional information to help in international negotiations.

The EPA's proposal presents estimates for climate effects occurring physically within the United States for a limited set of damage categories but also claims these estimates cover only a subset of total damages, do not capture spillovers or indirect effects, and do not reflect benefits for U.S. citizens and residents. The EPA gives these shortcomings as major reasons for presenting only global damage estimates.

We disagree. In fact, a rich set of economic and environmental data is available to support relatively complete estimates of damages to the United States.

Presenting climate-control benefits to the United States is consistent with the Biden administration's commitments to consider the equity effects of environmental policies. An exclusive focus on the global SCC is at odds with President Biden's memorandum calling for more

distributional analysis regarding "disadvantaged, vulnerable or marginalized communities" in the United States. The development of a domestic SCC estimate is a prerequisite for a distributional analysis of the effects on such communities.

The EPA's proposal asserts that the U.S. use of a global estimate of damages will encourage other nations to reduce future emissions. But this seems like wishful thinking. Most countries are already failing to meet their pledged non-binding commitments under the 2015 Paris Agreement. It is longstanding practice in U.S. regulatory analysis to incorporate only those changes in behavior required by current law or binding agreements, not goals or pledges. In addition, focusing strictly on global SCC presumes that U.S. policymakers are indifferent about whether climate-control benefits occur in the United States or elsewhere in the world. Such indifference would be surprising news to members of Congress and to U.S. taxpayers and voters, who have a right to know the benefits of GHG emissions cuts to the United States and the rest of the world.

The choice to develop domestic as well as global SCC estimates affects incentives to both the EPA and the outside academy to improve such estimates. The EPA has chosen to develop a global SCC estimate, a summary measure of a dauntingly complex reality. The agency's failure to provide a domestic SCC estimate might effectively chill efforts to improve the technical quality of such estimates.

The EPA should consider and report estimates of the benefits to the United States from GHG emissions reductions. Focusing solely on global benefits of such reductions without considering the corresponding benefits to the United States provides inadequate transparency to Americans who will bear the costs of emissions restrictions adopted by U.S. regulators. R

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Is a Child's Life Twice as Valuable as an Adult's?

BY THOMAS J. KNIESNER AND W. KIP VISCUSI

The rise of interest in evidence-based policymaking has created incentives for regulatory agencies to demonstrate the overall benefit–cost merits of their policies. An agency can use evidence to choose more cost-beneficial policies, or it can create the appearance of desirable policies by changing the ground rules by which it assesses a policy's merits.

The Consumer Product Safety Commission (CPSC) recently chose the latter course when monetizing the benefit of mortality risk reductions for children from a proposed safety standard for operating cords on custom window coverings. The cords are currently estimated to be responsible for nine fatal injuries annually. Each of those deaths is a tragedy, but together their loss as measured by typical value of a statistical life (VSL) estimates would not justify the cost of the proposed standard. Instead of accepting that calculus, the CPSC changed its policymaking rules to double—and considers tripling—the VSL to analyze the proposed rule.

Equitable VSL / Mortality costs comprise the most prominent share of life-saving policy benefits, and risks to children are a major focus of CPSC efforts. Doubling the rate at which regulations' benefits are valued can result in major swings in regulatory policy attractiveness.

Agencies throughout the government use VSL estimates to monetize the mortality risk reductions of policies. The underlying principle guiding benefit assessment for mortality risks and other policies is that it is based on individual willingness to pay for the risk reduction. The principal source of willingness-to-pay values consists of data drawn from actual decisions that people make with respect to mortality risks. Most of the revealed preference estimates are drawn from studies of wage premiums workers receive for mortality risks. There is almost a half century of economics literature documenting the magnitude of the wage premiums workers receive for health risks.

Agencies use this information to apply an average VSL in the range of $11 mil-

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lion to $12 million. These values make no distinctions based on age, income, race, gender, or other personal characteristics. We refer to the practice of valuing risks symmetrically as equitable risk tradeoffs.

There is, of course, potential heterogeneity in the VSL. More-affluent people require higher levels of compensation to incur a given risk. There are also age variations in the estimated VSL amounts across different age groups. Estimates of the VSL for labor market risks display an inverted U-shaped pattern that peaks in middle age and is lower for a worker aged 20 than it is for a worker aged 60. However, government agencies do not make distinctions related to differences in the VSL by age, but instead treat mortality risks symmetrically, consistent with our equitable risk tradeoff approach.

Estimating VSL for children / How should we think about valuing risks to children? Instead of exploring private willingness to pay to reduce mortality risks, the government might focus on some other measures or consider what mortality risk reductions are worth, such as longevity of the individuals whose lives are being protected. Children have longer expected remaining lives than adults, so a greater quantity of life is at risk. However, government agencies have generally not adopted a length-of-life metric for valuing mortality risks. The CPSC itself acknowledges that the Office of Management and Budget has specifically cautioned against using age-adjustment factors when applying the VSL and that no other agency uses a different VSL number for children. But it also notes that the CPSC is not legally required to follow OMB guidance.

The CPSC goes beyond appealing to a quantity-of-life rationale for doubling the VSL for children. Its justification draws on stated preference surveys, some of which indicate that people might be willing to value children's lives more highly than the lives of adults. Responses to hypothetical survey questions are often not a useful guide for policy. Stated preference evidence is not as informative as revealed preference data based on actual risk-taking decisions. Stated preference studies can be instructive but are often problematic and are subject to rampant potential biases.

Besides the broader concerns just mentioned, the available evidence with respect to children is quite sparse, particularly compared to the huge literature on VSL more generally. CPSC cites a review of only five stated preference articles that were based on four surveys. Even if the studies are reliable, they constitute a very slim empirical foundation for a major shift in benefit assessment practices.

But the deficiency of the empirical justification offered by the CPSC is even greater. To utilize any benefit value, it is a prerequisite that the analyst demonstrates that it is appropriate to transfer the benefit value from one context to a different situation. The available stated preference studies cited by the CPSC encounter two deficiencies with respect to the benefit transfer issue. First, half of the samples considered focused on populations outside the United States: one in Italy and one in France. Assessments of the VSL vary greatly by country. The age-related differences in the relative value of risks to children may vary as well. Countries have different age distributions, income levels, health care systems, and social norms.

The second benefit transfer deficiency is that none of the types of death considered in these articles are similar to the nature of the deaths addressed by CPSC policies. Cancer, respiratory disease, and foodborne illness deaths are the focus of the surveys, not traumatic injuries regulated by the CPSC, such as children injured by cords from window coverings.

The practical impetus for the CPSC's effort to use a greater VSL for children is to justify a prospective regulation. Based on a conventional VSL, the benefits for the proposed corded blind regulation fall far short of the costs. Doubling the VSL for children boosts the apparent attractiveness of the regulation, but even that effort to bolster the policy's benefits does not carry the day. The CPSC then presents a sensitivity analysis indicating that a *tripling* of the VSL for children would come close to making the benefits greater than the costs. While the CPSC's proposed guidance for its standard VSL rate when valuing risks to children is to double the average societal VSL, the CPSC may advocate whatever VSL multiple is needed to create the illusion of a desirable policy in order to make undesirable regulations appear to be worthwhile.

At the other end of the age spectrum, the CPSC also considers regulations to protect senior citizens from product injuries. How it will value deaths of seniors may turn out to be even more problematic. In its recent analyses, the CPSC suggested that the potential for using a lower VSL for seniors is an active area of research, which is a topic that we addressed in an earlier *Regulation* article. (See "What Are 750,000 Senior Deaths Worth?" Winter 2022–2023.) If the CPSC adopts a lower VSL for senior citizens, it will once again use out-of-the-mainstream practices for regulatory analysis. Ever since the outcry that resulted when the Environmental Protection Agency used a "senior discount" to value mortality risks for people over age 65 in its 2003 analysis of the Clear Skies initiative, government agencies have steered clear of devaluing the lives of senior citizens.

Looking ahead / At some point, government agencies may choose to adopt different VSL levels for children or other age groups such as adults over 65. Any future efforts to improve the mortality risk calculations for government regulations affecting children or other demographic groups should be based on solid empirical evidence rather than an attempt to justify regulations that would not otherwise pass muster based on economic efficiency considerations. *R*

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