GENERAL DISCUSSION N. Gregory Mankiw agreed with most of what was said, but took issue with Martin Feldstein's contention that "much of the 2.5 trillion in funds that have been accumulated abroad would be repatriated and invested in the United States." First of all, Mankiw remarked, in jest, that any time an economist says something is "obvious," one should probably be suspicious about whether it is true. In this vein, Mankiw was not convinced that Feldstein's statement about repatriation was true. Take Google, for example, which is headquartered in the United States but has a major subsidiary in Ireland. Suppose Google Ireland is sitting on \$1 billion in cash and decides to move the money to its U.S. accounts. Doing so would "bring the money back to America," but would not increase investment in the macroeconomic sense—unless Google was severely credit constrained. Google's U.S. parent could presumably borrow if it needed to, so if Google Ireland was sitting on \$1 billion in bonds and its U.S. parent had \$1 billion in bond liabilities, then the transfer from Ireland to the United States would wipe out the liability, but there would be no real investment in the macroeconomic sense. Therefore, Mankiw was skeptical that a future repatriation holiday would have a significant macroeconomic effect.

Robert Hall believes that something resembling a "business tax" may result from the current round of tax reform, and thus it is worth thinking more about what a business tax really is. According to Hall, an "axiom of tax theory" for a competitive economy is that a business tax that includes a first-year write-off of investment yields a \$0 present value of tax revenue, which in turn implies that a consumption tax—a tax on total income less investment—is equivalent to a wage tax. But in reality, a business tax has a positive present value. A business tax should apply to pure business profit, but the tax base for a business tax typically includes much wagelike income. For instance, the entrepreneurial income of subchapter S pass-through entities is taxed as capital income rather than wage income. Owners of S corporations do not pay self-employment tax. Hall explained that the Internal Revenue Service attempts to deal with this problem by requiring S corporations to pay market salaries to their owners, but it appears that a good deal of the remainder is actually wage income that is treated as capital income. Hall believes that some tax reform architects

^{1.} For extensive evidence on this point, see Matthew Smith, Danny Yagan, Owen Zidar, and Eric Zwick, "Capitalists in the Twenty-First Century," working paper (https://eml.berkeley.edu/~yagan/Capitalists.pdf).

believe pass-through entities that generate mostly professional income should be eligible for very low tax rates. The reality is that pass-through entities produce a lot of wage income, so they should be taxed at the regular income rate; that is, pass-through income should not be subject to a business tax that has a present value of \$0. Put differently, it would be a disaster, according to Hall, if policymakers were to say, "Well, if a properly structured business tax has a present value of \$0, we might as well not have one." Such action would leave a gigantic hole in the tax system. Hall believes that policymakers should not give a bargain tax rate to what is actually professional or entrepreneurial income.

Alan Blinder thought the four presentations were excellent, calling Alan Auerbach, Gita Gopinath, James Hines, and Martin Feldstein "a great quartet." However, he warned that if the tax system were to depart from neutrality in the ways described by Hines, "it would not be these four people that get to decide the deviations from neutrality." Rather, congressional committees would decide on the deviations—with decisions that are bound to be based more on politics than on, say, "relative elasticities of demand."

Blinder also noted that there is a simple, legal way to avoid the problem with repatriation, which is to leave money abroad but borrow in the United States. This, according to Blinder, is different from the case that Mankiw described, in which the company does not need to borrow. Blinder wondered if anyone knew how much of this was actually occurring. Jonathan Pingle noted that despite Apple's estimated \$230 billion in offshore earnings in May 2017, Apple still issued bonds. He guessed it was not lost on Apple's corporate management that it could borrow very cheaply in the United States, and thus there was no need to tap its overseas earnings.

Blinder was sympathetic to the points made by Gopinath, who emphasized the effect of monetary policy on exchange rates. An interesting "stylized fact" that Blinder believes to be very germane to the border-adjustment tax debate is that there are roughly \$50 in asset transactions for every \$1 in transactions involving imports and exports. Therefore, to a first approximation, trade should have almost nothing to do with the exchange rate. Models that attempt to describe what will happen to the exchange rate if a border-adjustment tax is implemented should keep this in mind, he concluded.

Alan Viard offered suggestions on how economists should think about the scope of feasible reforms, based on observations from the tax debate during the past year. He expressed admiration for David Bradford's "X Tax," and explained that the House Blueprint's business cash-flow tax was a partial movement toward an X tax.² In view of the widespread confusion and misconceptions that the Blueprint encountered, however, Viard concluded that economists should shift their attention away from innovative solutions, such as the X tax, that cannot be effectively explained to policymakers and the public. He recommended that economists instead focus on long-standing conventional tax reform options that are easier to understand and explain, noting that such options can offer significant economic benefits, even if they are theoretically less attractive than more innovative reform options.

Viard stated that if he had more time, he would have delved into some of the oddities of the border-adjustment debate, particularly how some of the arguments have flipped over time. For example, supporters of border adjustment have begun to embrace the economic argument that the exchange rate would adjust, while opponents claim it would not. According to Viard, each group tended to hold the opposite belief just a decade ago.

Returning to his call to focus on conventional tax reform options, Viard explained his view that if the United States were to institute a national consumption tax, it would likely take the form of an old-fashioned value-added tax (VAT). One of the VAT's advantages is that it receives more sensible and transparent treatment under financial accounting rules. Viard also contended that border adjustment would be better understood under a VAT than under an X tax or a cash-flow tax, because people would expect the Federal Reserve to raise the domestic price level under a VAT, avoiding any need for movements in the nominal exchange rate. Although a VAT would be easier to understand and market than an X tax or cash-flow tax, it would still likely be met with political roadblocks. Viard added that if a consumption tax is not feasible, one should consider reforms to the income tax system, such as taxing shareholders instead of corporations.

William Gale agreed with Mankiw on the effects of repatriation, and emphasized that repatriation is not a geographic concept. For example, a company could bring money into the country without recognizing the funds as income, but the company would not be allowed to distribute it to shareholders or use it to finance investments. Gale was not defending the existing system, but simply wanted to bring to light this often-

^{2.} David F. Bradford, *The X Tax in the World Economy: Going Global with a Simple, Progressive Tax* (Washington: AEI Press, 2004).

misunderstood issue about repatriation. Gale noted that much of the nonrepatriated funds are already deposited in U.S. banks or used to hold bonds, and thus one should not expect large economic effects from a repatriation holiday.

On the issue of border adjustment, Gale believes that part of the misunderstanding stems from the feeling that this issue "came out of left field." He thought the confusion might stem from the fact that the United States does not have a VAT, and he noted that nearly every other county in the world has one, and that every other country adjusts its exports and imports under the VAT for taxes. He pointed out that state sales taxes are implicitly adjusted for "exports" and "imports" into and out of the state, but expressed his disappointment that this example of border adjustment has not permeated the public perception. He thought it was unfortunate that a border-adjustment tax was proposed by the Republicans alone because there was a good case for Democrats to be in favor of it. It became a partisan issue once it was branded as a Republican proposal.

Gale then turned the conversation toward the benefits of the destination-based cash-flow tax (DBCFT), one of which is that it is immune to the "race to the bottom" currently faced by the corporate tax. Hines's table 1 shows corporate income tax rates across countries, but Gale noted that the rates only matter for production or profit-shifting if the countries have income taxes. Under a DBCFT, a country could have the same tax rate as in Hines's table, but it would be a tax on value added less wages, not on production in the country. He reiterated the point made by Hall, that the DBCFT exempts the normal return. If major trading partners also implemented a DBCFT, it would eliminate most exchange rate issues. Nevertheless, Gale conceded that this would be an almost impossible feat.

Adele Morris noted that no discussion of tax reform would be complete without acknowledging the potential for an efficiency-enhancing excise tax on greenhouse gas emissions. According to Morris, a \$25 tax per metric ton of greenhouse gases emitted, rising at 2 percent inflation each year, could easily raise \$1 trillion in revenue during the 10-year budget window, while at the same time reducing other emissions, which would have human health and ecological benefits. Morris believes discussion of including a carbon tax among the broader business tax reform discussion could help garner Democratic support for some of the policies laid out by Feldstein. Implementing a carbon tax would also justify obviating the Environmental Protection Agency's greenhouse gas regulatory program, which is far less efficient or effective. Morris believes there is room to strike a bipartisan deal, which she feels might not be as unlikely as many people think.

Joe Beaulieu made three points regarding items that had been lost in the discussion thus far. First, he mourned the loss of the discussion about border-adjustment taxes in today's political environment, and believes there was a misunderstanding regarding the asset and goods markets. Although the asset market is much larger than the goods market—a point noted by Blinder—he doubted that areas with fixed exchange rates would not react with regard to their exports. Second, Beaulieu noted that the discussion of the exchange rate and the border-adjustment tax's effect was interesting, but reminded the group that it would be part of a broader tax reform plan. He argued that tax reform would bring the United States from having one of the worst business tax regimes to something much better, which would have obvious implications for the exchange rate. Third, he pointed out that the alternatives to moving to a territorial system without other things like a border-adjustment tax to affect inversions would require massive amounts of regulation, which would have their own costs and would be subject to ongoing lobbying.

Robert Gordon expanded on Mankiw's point that repatriated profits are not going to cause a large increase in investment. Specifically, he aimed to extend it toward the argument for a reduction in the corporate income tax rate itself. He pondered why investment has been so weak over the last five years, while corporate profits as a share of GDP have been at an all-time high. He suggested that an answer might be that firms have been paying dividends and buying back shares instead of investing. He believes that one of the problems with productivity growth is the fact that total factor productivity growth is so low, and that the long-standing advantage of manufacturing over service productivity has disappeared. In this regard, Gordon pointed out that total factor productivity growth in durable manufacturing, except for computers, has been *negative* during the past 10 years. He believes the United States has a productivity problem that cannot be solved by investment, and that a corporate tax reduction would not cause an investment boom.

Richard Cooper noted that many international comparisons were being made during the discussion, which he liked in principle. However, he questioned the assumption that other countries know what they are doing but the United States is wrong—for example, saying that "every other country" has a lower corporate tax rate and "every other country" has a VAT. He offered the example from about 25 years ago, when the United States implemented universal banking, which was inspired by competition with Europe and Japan. According to Cooper, universal banking was a

mistake that the United States has been paying for during the past decade. He warned that just because other countries do something different, it does not mean that they are right. Cooper echoed Gordon's point that, in general, lower tax rates in Europe and Japan have not led to increases in real investment. He closed by repeating his skepticism about international comparisons in this context, and he argued that though tax competition has certainly affected employment, there is scant evidence that it has increased growth rates.