the virus. Lipsitch and two colleagues explored the ethics of this approach in a paper published in The Journal of Infectious Diseases. He suggests it may be ethically superior to standard trials, because the faster a vaccine is approved, the more lives will be saved. In addition, the risk that a coronavirus vaccine could enhance the disease in some people might be detected more quickly in such a trial, preventing harm in a larger cohort. Any participants in the placebo group who became ill would receive excellent care and access to any known treatments, and only healthy young volunteers without comorbidities would be chosen, preferably from settings where they were already at high risk of natural infection. Discussions of such trials have occurred at the World Health Organization, in Congress, and at the FDA, and there is no shortage of volunteers: an independent website, 1daysooner.org, has attracted more than 26,000 people from 102 countries who wish to participate.

Jacobson Research Professor of public health Barry Bloom, the former HSPH dean, points out, however, that anyone volunteering for human experimentation must be able to provide informed consent—but not even medical experts know all the risks associated with COVID-19. Though he is not opposed to human challenge trials in principle—and he notes that this is the only substantial issue on which he and Lipsitch have ever disagreed—Bloom adds that he knows of no precedent for such trials when no approved treatment is available. And he worries about the issue of moral hazard: “In the world of economics, it occurs when someone profits, or in this case is protected, from 102 countries who wish to participate. Jacobson Research Professor of public health Barry Bloom, the former HSPH dean, points out, however, that anyone volunteering for human experimentation must be able to provide informed consent—but not even medical experts know all the risks associated with COVID-19. Though he is not opposed to human challenge trials in principle—and he notes that this is the only substantial issue on which he and Lipsitch have ever disagreed—Bloom adds that he knows of no precedent for such trials when no approved treatment is available. And he worries about the issue of moral hazard: “In the world of economics, it occurs when someone profits, or in this case is protected, from

The Head of the Line

The factors influencing the fall semester—and beyond

As Harvard leaders—and their higher-education peers nationwide—make early-summer decisions about the academic year to come, they confront extraordinary uncertainties, with little useful guidance. The Great Recession and after were financial crises, highlighted by the collapsing value of the endowment, and resolved in time by belt-tightening, economic and financial-market recoveries, and copious fundraising. The COVID-19 pandemic is a health crisis requiring that students and teachers be separated from one another and from campus, as researchers are from laboratories, libraries, collections, and field work—thus impeding every aspect of a university’s work. That has raised costs and crimped revenues—a follow-on financial threat exacerbated by the virus-precipitated severe recession. The University must envision anew how to operate safely in this context by fall, and within its distinctive community and resources.

• How to teach? The headline decision for every college and university is whether to aim for residential education by summer’s end; rely on remote instruction (improved from the offerings cobbled together under duress last March); somehow mix the two; or adopt an altered schedule and program. The California State University system announced early that it will be online this fall. Notre Dame plans to begin the semester in residence in early August, operate continuously until Thanksgiving, and end the term then. Stanford, on the quarter system, will open on time and allow undergraduates to be in residence two of three quarters, but with online teaching the “default” throughout the year—per-
haps a less feasible option for Harvard’s semester system. And some schools may opt to invite certain cohorts to campus (freshmen, seniors, those who need labs or performing-arts facilities), but not others—or have students attend on a staggered basis.

These models merited attention at Harvard because its schools’ student bodies and pedagogies vary, meaning they might not all adopt the same instructional model. Provost Alan M. Garber advised the community on April 27 that “Harvard will be open for fall 2020” (see harvardmag.com/fall-plans-20). But he added: “[W]e will need to prepare for a scenario in which much or all learning will be conducted remotely”—and pointed to the possibility of “different approaches to learning and research” among the schools.

Indeed, on May 13, Harvard Medical School dean George Q. Daley and senior colleagues announced that “fall 2020 courses will commence remotely for our entering classes of medical, dental and graduate students” and for external education programs. They hoped “to be able to hold in-person research and clinical experiences for our returning medical and graduate students.”

The large next shoe dropped on June 3, when the Graduate School of Education announced it would be online for the 2020-2021 academic year, and the Graduate School of Design (GSD), Divinity School, Harvard T.H. Chan School of Public Health, Kennedy School (HKS), and Law School (HLS) all announced online operations for the fall term. (See harvardmag.com/covid-onlineschoolsdistributiondown-20 for a full report.) The Faculty of Arts and Sciences (FAS; comprising the graduate school, College, and school of engineering and applied sciences) and Business School (HBS) are on deck.

Who will enroll? Given its fiercely selective admissions and the perceived value of a Harvard education, the University is well-positioned to attract students (and enable them to attend regardless of financial need)—major advantages. Institutions of higher education nationwide report lower rates of acceptance than anticipated; vocal resistance to matriculating if instruction is online (and to paying full tuition if so); and, of course, health concerns. A survey of 10,000 students conducted after an Inside Higher Education report on options for fall instruction yielded 78 percent of respondents who found in-person classes “appealing”—but less than one-third judging any online-only alternatives similarly.

If safety issues dictate remote learning, some undergraduates may opt for gap years or other leaves; the Yard and House residences, common dining halls, and larger lecture classes are all antithetical to social distancing. (Ironically, of course, fewer attendees in the fall would simplify measures to “de-densify” the campus for those who are present—perhaps accommodating some in those emptied professional-school facilities.) The graduate and professional schools may present lesser enrollment challenges. All across campus, the welfare of faculty and staff members considered at high risk also weighs in the planning.

Another calculus comes into play for international students. Many borders are closed, many flights are grounded, and the United States has shut down visa issuance. About 800 undergraduates (12 percent of the total) are international—but about one-third of the Graduate School of Arts and Sciences cohort are from outside the United States: a significant number of research and laboratory assistants, and instructors of undergraduates.

Those obstacles loom even larger for some of the professional schools: HBS (37 percent of M.B.A. candidates), HKS (48 percent of degree candidates, including more than three-quarters of those in one program); and GSD (55 percent of degree candidates). Even HLS, with its largely U.S.-focused curriculum, has a significant number of international J.D. candidates (14 percent) and a large cohort of international L.L.M. students (typically, 180 annually).

The latter three have made their decision: atop health concerns, with the borders shut, de facto or de jure, they clearly faced a radically smaller resident cohort and a very different student body and classroom experience. Schools dependent on tuition income may face transformed finances as they support remote teaching while preparing to resume residential classes (see below on students’ choices). HBS announced on April 27 that students admitted for this fall (the M.B.A. class of 2022) may defer their enrollment for one or two years; vacant spots will be filled, if possible, from the waitlist—but the school is willing to have a smaller class than usual.

What are the economics? The University has estimated that revenue would fall $415 million short of expectations for the fiscal year ending this June 30, and a further $750 million short of the expectations built into the budget for fiscal 2021, drawn up just a few months ago (see a full report at harvardmag.com/750m-shortfall-20). In her May 5 note conveying the news, executive vice president Katie Lapp cited spring-semester room and board refunds; cancellation of residential continuing- and executive-education programs; and the loss of research funding as labs closed. Revenue for the fiscal year now ending might have been about $5.8 billion pre-coronavirus, rising to perhaps $6.1 billion in the year on deck—implying shortfalls of 7 percent (all coming in a rush late in the semester) and a further 12 percent, respectively.

Because Harvard committed to pay idled staff members and contractors (dining and janitorial workers, research assistants, security guards) through June 28, the forgone revenues were not equally offset by expense reductions, so operating surpluses will be reduced, or turn into losses. Looking into the next year, Lapp raised the possibility of furloughs or layoffs—likely if housing, dining, and other facilities are not in use.

Executive education. The evaporation of continuing and executive education illustrates how the 2020 pandemic differs from the purely financial upheaval a dozen years ago, and puts these daunting sums in context. Netting out financial aid, Harvard received about $500 million in continuing-education revenue in fiscal year 2019—nearly half from HBS’s powerful franchise. (FAS’s extension operation ranks second in size.) With the suspension of residential teaching, HBS’s executive-education business essentially vanished from March through at least this summer. That abrupt upheaval, plus slower publication sales and reduced philanthropy, lowered expected revenue for this fiscal year by $15 million (see harvardmag.com/covid-schools-response-20).

The school telegraphed in April that its budgeted $43 million surplus would turn into a $22-million deficit, but by early May forecast savings and spending cuts that could yield a break-even year, or perhaps even a small surplus. In fiscal 2021, HBS anticipated “an even larger drop in revenues,” reflecting executive education and other pressures—implying “a potential deficit for the year of as much as $80 million.” For details across the University, see harvardmag.com/exec-ed-losses-20.

Degree-program tuition. In fiscal 2019, HLS, the GSD, and HBS derived 45 percent, 42 percent, and 41 percent of their operating revenue, respectively, from tuition (including executive education). The FAS, in contrast, got 50 percent of its operating revenue from endowment distributions, and just 23
percent from student income (including extension). HBS’s leaders alluded to potential pressure on M.B.A. enrollment, and therefore tuition income—but the ability or willingness to enroll this fall of the heavily international student bodies at now-online schools such as the GSD and HKS is obviously consequential as well. HLS has to be monitoring its census very closely, too.

Research. Harvard scholars receive more than $900 million in sponsored support for research annually: about one-sixth of consolidated revenues. Programs focused on the coronavirus obviously are proceeding at full speed (see page 18), but other activities dependent on laboratories, collections, or field work are operating minimally, or not at all. Funds have been available to sustain staff during the enforced shutdown, but at some point, the work must be pursued: absent supplemental federal appropriations or other income, faculties will have to make up the gap from elsewhere in their budgets.

Other losses. HMS—which derives more than 60 percent of revenue from sponsored-research support and endowment distributions—has other vulnerabilities. On May 7, Dean Daley advised the community that HMS would incur losses of $590 million to $655 million in fiscal 2020. He cited executive-education shortfalls, but most prominently, a strategic use of HMS’s resources: “our decision to stand in solidarity with our affiliated hospitals...by forgiving their FY20 contribution to HMS, which totals $51 million.” The affiliates, incurring reported multibillion-dollar shortfalls in revenue as they devoted their resources to caring for COVID-19 patients, are the school’s major clinical teaching partners—so this action represents an investment in both the future of medical education and the hospitals’ foundational mission as care institutions.

The endowment and philanthropy. With the endowment’s value likely reduced, the Corporation will cut the funds distributed in fiscal 2021 by 2 percent, and further assess distributions by 3 percent to pay for coronavirus costs—reversing the recent annual growth in revenue from that source. (Read a full explanation at harvardmag.com/covid-onlineschools-distributiondown-20.) Also of immediate moment may be the fiscal effect of the pandemic on donors and their potential interest in new needs revealed around the planet. There are indications both that campaign-fueled largess had already crested (current-use gifts to FAS declined 14 percent in fiscal 2019) and that some major donors are reassessing their priorities. And of course President Lawrence S. Bacow, the deans, and development professionals have been grounded since March, limiting their opportunities to outline Harvard’s evolving priorities.

Higher costs. Finally, the COVID-19 campus differs from its predecessor. Hardening Harvard against the virus and modifying operations imply continuing expenses. Deans thus find themselves learning about enhancing ventilation to increase indoor-air exchanges, retrofitting doors and bathrooms for hands-free operation, and perhaps bolting down furniture to enforce safe distancing. Laboratory staffing may have to be altered, and personnel equipped with shielding and protective equipment. (Given local orders suspending construction from April into late May, the engineering and applied sciences faculty deferred its planned summer move to its Allston facility until January; see harvardmag.com/seas-move-deferred-20.)

And with fully residential teaching deferred, the hurried training in Zoom and redesign of class exercises of March must morph into something more thoughtful and engaging—requiring further heavy investment in remote instruction, but perhaps leading to new pedagogies in the future.

• WWYPSD? What will peer institutions do? Circumstances differ, even among academically similar universities. Columbia and Harvard are embedded in dense urban areas that are world travel portals—and New York and Boston became intense COVID-19 hot spots, with widespread infections and mortality. Employees in both cities depend on old public transit systems to get to work. Yale, Brown, and Penn appear less acutely affected, as does Stanford, given California’s swift response to the emerging pandemic.
Yesterday’s News
From the pages of the Harvard Alumni Bulletin and Harvard Magazine

1935 The Summer School hosts multiple discussions of national educational policy, the editors report, noting “signs that academic freedom may become a central issue in a modern struggle as momentous as the earlier struggles in this country for the principle of liberty.” They encourage “bring[ing] into schools and colleges a closer contact with the realities of life. Quacks and nostrums still succeed... despite advances in the social sciences, there is no safeguard in the general mind against the demagogue, the jingo, or the maker of false economic promises. Nor have the natural sciences routed superstition. Those who still believe that the truth has a least some part in making human beings free have much to do in seeing to it that the truth is widely known.”

1940 Harvard sets up a summer aviation camp at Plymouth, offering students a chance to earn private pilots’ certificates from the Civil Aeronautics Authority.

1955 Helen Keller ’04 becomes the first woman to receive an honorary degree from Harvard. Her fellow honorands include Andrew Wyeth, Archibald MacLeish, West Germany’s chancellor, Konrad Adenauer, and Harvard’s president emeritus, James Bryant Conant.

1960 The Faculty of Arts and Sciences establishes a new degree, A.B. in Extension Studies, to replace the Adj.A. (adjunct in arts) previously awarded.

1970 The Faculty of Arts and Sciences resoundingly votes down the so-called Princeton Plan already adopted by 15 other universities: a proposal for a two-week recess during the fall so students may participate in political campaigns.

1990 Widener Library will require stack users to sign in “after an unidentified vandal mutilated more than a hundred books and a phone message threatened physical harm to anyone who interfered.”

2010 The Medical School updates its conflict-of-interest policies, prohibiting faculty participation in industry-sponsored speakers’ bureaus and limiting industry funding for continuing medical-education course content.

Addressing Climate Change

Even as the University operated remotely during the second half of spring term, it announced new measures to address the other great global challenge, climate change. In an April 21 announcement tied to the fiftieth anniversary of Earth Day, Harvard unveiled an initiative to make the endowment’s assets “net-zero”—meaning the holdings would contribute no overall release of greenhouse gases—by 2050. The plan depends on significant advances in research and portfolio management (and, of course, in the operations of the companies and technologies in which the endowment might invest).

The announcement was framed as a broader response to the Faculty of Arts and Sciences’ (FAS) February vote calling for divestment from investments in enterprises that produce fossil fuels (for background, see harvardmag/fas-divest-