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Reconstructing a public economics: markets, states and societies

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The purpose of studying economics is not to acquire a set of ready-made answers to economic questions, but to learn how to avoid being deceived by economists (Robinson, 1975¹).

Liberating contemporary economic analysis from the straitjacket of mainstream neoclassical theory is the animating theme of the essays assembled in this special number of the *Real-World Economics Review (RWER)*. The authors of the works assembled here are all committed to the idea that what is regarded by traditional economic theory as a set of exogenous forces framed and deployed from outside the market mechanisms that are the focus of the discipline – namely, the public sector – is in fact an integral agent that directly affects the very issues and phenomena neoclassical theory claims to explain. Indeed, it is the very failure of traditional economic thinking to account for the “public economy” in any systematic and meaningful fashion that prevents it from explaining how societies actually produce goods and services and, in compensation, constructs inapt and futile framings, such as “market failures,” to explain why governments exist.

In contradistinction to prevailing doctrine, the following articles strive to reconstruct a public economics by embedding the public sector intrinsically within economic models. Rather than separate the “public sector” from economics, understanding collective action as something distinct from the economy, a public economics views the entire economic system – the “macroeconomy” as a whole – as comprised of multiple economic systems: of markets, of public activities, and of domestic interactions. As Neva Goodwin explains (“There is More Than One Economy”), human economies may be understood as a construction of the market or “private business economy,” a “public purpose economy,” and a “core economy.” The market is the focus of virtually all of mainstream economic thinking today. Public purpose economy is defined by Goodwin as government, non-profit, and non-governmental entities that focus on a broader array of goals not simply defined by profit-maximization. In the core economy, one finds the domestic activities of consumption, distribution, and resource management that are focused on the survival, nurturing, and welfare of its constituents.

Simply understood as venues within which rational agents pursue optimization goals, markets cannot account for public purpose articulated and projected within collective-action dynamics, domestic and intimate goals framed by affective and cultural behaviors, and ecological and environmental contexts imposed by the physical and biological realms within which all human activities occur. That being the case, an economics that only accounts for the workings of “perfect” markets, understood to exist separately from domestic, public, and ecological frameworks, is not even remotely useful in explaining how economies actually function, let alone how they might be improved. If, for example, government is understood simply as a remedial instrument to rectify “market failure,” its essential role in the economic mechanisms of consumption, production, and distribution is obscured. Similarly, if both the domestic

¹ Joan Robinson, “Marx, Marshall and Keynes,” in her *Collected Economic Papers (Volume II)* (Oxford: Basil Blackwell, 1975), p.17.

sphere (of family and human relationships) and the environment are grasped as dimensions external to, and non-constitutive of the economy, it becomes impossible to analyze and predict economic behaviors and outcomes in reliable ways.

Reframing how economic theory accounts for the public and domestic realms of social life is uniquely tied to the manner by which we understand government action. As June Sekera demonstrates (“The Public Economy: Understanding Government as a Producer”), by viewing governments as essentially economic “operating systems,” that function according to a non-market economic logic and within the constraints of biophysical realities, we gain a far more effective understanding and appreciation of society, markets, and the environmental impacts of economic activity. This not only allows for more accurate analyses of proposed policies; it also animates a deeper and more genuine understanding of the ways in which public goals and purposes may in fact be effectively conceptualized and achieved. There is no better historical demonstration of this fact than in the twentieth century experience in the United States.

The transformation of the American political landscape in the wake of Vietnam era had subverted the very foundations of the liberalism that had made sense out of a genuinely public economics. An emphasis on political economic issues that had framed the high tide of activist government since the Great Depression of the 1930s had provided a community of professionals with both the means and the ends to deploy their expertise. As soon as social issues concerning opportunity and equality occupied center stage, most dramatically in the formulation of the 1960s “War on Poverty”, American liberalism ran headlong into the abiding national puzzle of race and ethnicity. A backlash was the inevitable result, one that shifted a dynamic emphasis on productivity and plenty during the 1950s and 1960s to a static refrain concerning the costs and benefits, the winners and losers in market outcomes during the 1980s and 1990s. So dependent had the promise of liberalism been upon sustained growth as a vehicle of redistributive betterment and justice that the first signs of macroeconomic instability robbed it of its voice and its authority. Indeed, by the last years of the century, “New Deal liberalism” was dead, and with it the hopes and achievements of a public economics.²

Perhaps it was predictable, given the rightward turn of American politics in the late twentieth century, that professional economics would itself regress and retrench. A kind of naïveté coupled with an unbridled enthusiasm had propelled the discipline's leading lights to make claims on its behalf it could not redeem. Once events, and the ideological shifts they provoked, overtook the statecraft economists had so painstakingly fashioned, their flanks were wholly exposed to an unrelenting and unparalleled assault. Reversion to classic principles, a rejection of heterodox notions, an insistence on a professional deportment unable and unwilling to join with the ideological issues in dispute, and a contentment with a return to scholarly detachment were understandable if pathetically timid reactions.

It has been a conviction of those who study the history of the sciences that moribund intellectual traditions may only be overcome by the effective articulation of alternatives. For modern American economics the possibilities for such a restructuring were by the late 1990s, precisely because of the effectiveness of the professionalizing processes that had obtained since the turn of the century, few and far between. A select group at leading colleges and universities continued to wield enormous influence over the distribution of research grants,

² The historical discussion that follows is drawn, in large measure, from my earlier work on the history of the American economics profession. See, for example, *A Perilous Progress: Economists and Public Purpose in Twentieth-Century America*. Princeton: Princeton University Press, 2001, ch. 6.

their own ranks replenished from a hiring process disproportionately focused on the graduates of a small number of highly regarded training programs, including their own. Any examination of publication practices in the field would demonstrate as well that the dissemination of research results remained powerfully concentrated in the hands of an elite few. It is a striking yet hardly surprising finding that, at the height of the economic instability occasioned by the Vietnam War, the OPEC oil price shocks, and the downward trends in productivity enhancement experienced throughout the 1970s, alumni of only seven graduate programs in the discipline authored well over half the scholarly articles published in the nation's three leading economics journals. Such disciplinary inbreeding was hardly conducive to the elaboration of alternative paradigms.

If, by the 1990s, economics was a social scientific discipline fast retreating from a public role it had sought for decades, it was clearly not the case that the influence of all its practitioners was on the wane. Supply-side theorists, in ways far out of proportion with their achievements, continued to enjoy a prominence and an authority in economic debate that was virtually hegemonic. Anti-Keynesian rhetoric became ever fashionable; calls for parsimony in governmental expenditure policy, often phrased in ways approximating a morality play, went virtually unchallenged. No better signal of the sea change that had taken place could be found than the news, broadcast in the fall of 1997, that N. Gregory Mankiw, a young economics professor at Harvard University, would receive a \$1.25 million advance from a major textbook publisher to produce a new volume in which Keynes's name barely appeared once. As advance copies of the text made their way into the hands of reviewers, even *Business Week* magazine could express alarm at the widening popularity of what was derisively called "feel-good economics."

There was, of course, a genuine logic to the whole process. Linked with the marvelously abstract claims of rational expectations theory, supply-side economics had succeeded in making a compelling case for the ineffectiveness of national policies that sought to intervene in the nation's markets. Indeed, the argument had been taken a step further by claiming that, even if the government sought to manipulate economic outcomes, it would only succeed in generating a perverse increase in idleness, and aggregate policies to enhance technological change and productivity would in the end only serve to reduce the total supply of goods and services. Thus situated within the analytical domain of supply-side theory, economic statecraft was stymied. Why do anything when activism brought no appreciable benefits? A new laissez-faire doctrine found the largest possible audience, and the hope for a reorientation of economic analysis that would have made sense of the disturbing events of the 1970s and 1980s, while remaining true to a commitment that had characterized the profession since the 1930s, went unrequited.

Following the economic turmoil of the early 1970s, indicting government for the nation's material woes had become an ever-more-expansive enterprise. Dismantling the Keynesian apparatus of the federal government had been only part of this project. Eager to ferret out any plausible cause of inefficiency and inflated costs in the national economy, analysts, political leaders, policy advocates, and pundits became increasingly preoccupied with the perceived burdens of governmental regulation in the marketplace. Deconstructing a variety of federal statutes and agencies, along the lines specified by an offensive against such statist intervention in economic affairs, became a significant parallel strategy in the eradication of Keynesian practice. Proponents of what was dubbed "privatization" argued that such reforms in the ways government did business would lead to greater efficiency in the allocation of scarce resources. By leaving decisions to businesspeople and other expertly trained

individuals in the private sector, it was claimed, an appropriate system of incentives and capabilities would yield a more optimal distribution of services and a more inspired utilization of scarce public monies.

One of most powerful weapons against a public economics, deregulation had a bipartisan gestation, its birth facilitated by the antitaxation attitudes fostered during the economic uncertainties of the 1970s. It was Jimmy Carter's presidential administration – building upon some initial and tentative steps taken by Gerald Ford's White House – that launched the first systematic efforts to reassess and ultimately eliminate to whatever extent possible federal oversight in the finance, telecommunications, and transportation sectors. The initial forays were focused predominantly in the aviation industry, culminating in the closure of the Civil Aeronautics Administration when Congress passed the 1978 Airline Deregulation Act. Fast on the heels of that landmark legislative decision, came the 1982 settlement between the Antitrust Division of the Department of Justice and the American Telephone and Telegraph Corporation (AT&T), an agreement that began the systematic deregulation of the nation's telecommunications infrastructure. Shortly thereafter, the Reagan administration began reconfiguring the government's role in the nation's banking industry, an effort that had profound consequences in the savings and loan sector for years to come. By the time George Bush took office, the momentum of the deregulatory process had grown very strong indeed. Declaring a moratorium on all new federal regulations early in 1992, the president also asked his deputy, Vice President Dan Quayle, to chair the new council on Competitiveness as an informal "superarbiter" of national regulatory issues.

While the Quayle Council lasted only a year, liquidated in its infancy by Democrat Bill Clinton in one of his first acts as president, the political movement of which it stood as a striking exemplar continued. So irresistible was the appeal of deregulation rhetoric that policy initiatives were proposed and often enacted without due consideration of either their justification or their consequences. Increasingly, mainstream American economists made themselves part of this process-often eager to formulate techniques for its implementation, rarely willing to confront many baseless assertions deployed on its behalf. Nowhere was this strange reality made more manifest than in transformation of the regulatory environment within which the nation's banking industry did its work.

Beginning with the Ford and Carter presidencies, operational rules for banks, brokerage houses, and savings and loan institutions were relaxed. Among brokerages, deregulation resulted in a proliferation of discount offices that allowed investors to avoid the expenses and commissions associated with more traditional houses. Among banks, the elimination of many restrictions on the geographic range of their operations stimulated competitive entry throughout many states, although by the early 1990s a re-concentration of assets through bank mergers began in earnest. In the savings and loan industry, however, deregulation contributed to a crisis of mammoth proportions.

It was in the period before deregulation, when rising interest rates and the proliferation of money market investment funds made it increasingly difficult for savings banks to offer depositors competitive rates of return, that the savings and loan catastrophe had its roots. As the rates paid on such alternative investments as money market funds dramatically increased (in no small measure pushed upward by the process of inflation that began in 1973), "Regulation Q," a federal rule limiting the maximum rate of interest that could be paid on savings and other demand deposits, made it virtually impossible for savings and loan institutions (S&Ls) to attract funds. Ironically, interest rate regulation had begun in 1933 when

the Federal Reserve System implemented its first version of Regulation Q. The goal had been precisely to prevent the competitive shopping around for interest returns and to encourage depositors to place their funds in institutions selected on the basis of reputations for solvency and safety.

Banking industry lobbyists, not surprisingly, wished to eliminate Regulation Q. In 1980, the Carter administration, ostensibly seeking to aid a troubled industry, eased interest rate restrictions by means of the Depository Institutions Deregulation and Monetary Control Act (known, by insiders, as the “Diddymac”). The new law abolished geographic restrictions on the investment activities of S&Ls, thereby bringing a national market within the purview of individual institutions that had operated locally for decades. It also provided for deposit insurance of up to \$10,000 for every savings account in the system- tendered by the Federal Savings and Loan Insurance Corporation (FSLIC), a derivative of the Federal Deposit Insurance Corporation (FDIC). S&Ls were no longer tied to deposits generated in their immediate communities but rather could attract deposits from far away by offering through brokers the high rates of interest made possible by deregulation itself.

Geographic deregulation created a national market in unregulated savings deposits- as, for the first time, S&Ls were allowed to offer account and credit privileges and other banking services nationwide, FSLIC guarantees simultaneously created a false sense of security within the S&L industry itself. The thrifts responded by investing in speculative commercial ventures in the hopes of shoring up their profitability- profitability that had been compromised for over a decade by Regulation Q. Thrifts’ net income, as a share of their total assets, had averaged only 0.5 percent throughout the late 1970s; it fell to 0.1 percent by 1980 and turned negative in 1981 and 1982. Home mortgage business, the mainstay of the industry since the Great Depression, dropped off. Indeed, it became increasingly (and uncharacteristically) common for the S&Ls to provide full financing for a broad spectrum of investments with little or no down payment.

A further difficulty emerged in this reformed environment. Thrifts found that the interest they earned on traditional mortgages provided insufficient funds to pay the higher interest rates they were now allowed to offer on an array of financial instruments. Some institutions thus began to use up their own liquid reserves to make good the difference. By 1982, fifty thrifts nationwide failed -- a rate unprecedented since World War II.

Congress, reflecting bipartisan concern for the S&L sector, responded with another revision of law. The Garn-St. Germaine Bill, signed into law by President Ronald Reagan in 1982, having gone “through Congress like a dose of salts, with virtually no hearings in either Senate or House Banking committees,” further loosened the restrictions on the kinds of investments S&Ls could make. The Federal Home Loan Bank Board, later reconstituted as the Office of Thrift Supervision, also participated in this strategy by reducing, virtually to zero, the minimum amount of capital that a bank was required to have on hand to underwrite particular investments.

In the savings and loan industry, the deregulation of the 1970s and 1980s generated hasty, at times foolish and even corrupt, decision making. Operating in unrestricted and almost unknown territory, S&Ls became involved in questionable investment schemes, many of them unsecured, some very risky. Moreover, in the late 1980s, as the real estate market softened (especially in the South and the southwest due to troubles in the oil, mining, and aviation industries), thrifts found even their traditional avenues of investment painfully encumbered.

Thus began a series of savings and loan failures that had no equal since the 1930s. Unable to make good their obligations to depositors, S&Ls exhausted their deposit insurance and approached the Congress for relief. The full dimensions of the “bailout” ultimately necessary to restore the industry to firm footing were nothing short of mind-boggling.

Deregulation, at least in the financial sector, thus failed its proponents.

Undertaken at the behest of an energetic and vocal academic and political constituency, it created vast costs in addition to its purported benefits. Regulatory reform, in this sense responded far less to the lobbying of public-interest groups than to the efforts of cadres of new entrepreneurs (such as Carl Icahn in aviation, and Charles Keating and Michael Milken in finance) and academic practitioners (such as Alfred Kahn, the Cornell University economist who was one of the original architects of airline deregulation) to gain access to particular markets and to enjoy and exploit new levels of statist influence and visibility. There were no mass demonstrations in state capitals or in Washington, D.C., to deregulate major sectors of American industry. In the hands of a small cadre, deregulation became an essential part of the doctrine of *laissez-nous-faire*.

The savings and loan debacle did nothing to stem the ardor of public officials for continued deregulation of the banking industry as a whole. By the spring of 1997, Clinton administration specialists prepared legislative proposals to allow insurance companies, banks, and securities firms to do business in one another’s markets. A practice long banned by the Glass-Steagall Act of 1933, which had been fashioned in response to the reckless management of investment funds that had helped make the crash of 1929 a catastrophe, the intermingling of banking and other financial operations had remained under close federal scrutiny for decades. The legislative passage of these proposals were secured in 1999. Meanwhile, the potentially anticompetitive and dangerous aspects of the proposed overhaul-such as the “tie-in” sale of mortgages and mortgage insurance, or the use of deposit funds in high-risk investments in which a bank had taken a particularly aggressive position-went mostly unremarked.

It was, to be sure, not simply the financial sector in which the consequences of deregulation expressed themselves in such negative ways-nor where the vast majority of the economics profession continued to stand mute, except in those contexts in which it could facilitate the deregulatory process itself. In the airline industry, where deregulation advocates had long pointed to apparent successes in the expansion of service and the lowering of fares, such that an ever-growing proportion of the nation’s population used air transport year after year, elimination of the Civil Aeronautics Administration generated a less than impressive record of economic accomplishment. From the early 1980s until 1988, the number of independent airline companies fell by more than half; the number of independent regional airlines declined from 250 to 170. In the same time period, over 300 small towns lost commercial aviation service altogether. As major companies, in the deregulated environment, created “hub” facilities, price competition in those particular markets virtually disappeared. Concerns about hard-pressed firms skirting safety regulations, manipulating labor practices, and delaying maintenance schedules proliferated nationwide. By the late 1990s, the industry had re-concentrated itself in the wake of significant mergers. Complaints about price fixing thus escalated. While many transportation economists had been quick to applaud the implementation of airline deregulation, virtually none of them spoke up about the problems that emerged in the newly configured industry.

Telecommunications afforded a particularly large and complex territory for deregulatory initiatives, especially given the dissemination of new technologies (ranging from personal computer to remote cellular phones to digital television to the Internet) throughout the business world and a large proportion of the nation's households. By ending the AT&T monopoly of the nation's telephone and telegraph market, the 1982 consent decree clearly led to a rapid drop in long distance toll rates. Much like the immediate impacts of airline deregulation, the divestiture led to a marked increase in the nation's use of long-distance telephony. At the same time, and again ignored by economists who had mobilized in favor of the breakup of AT&T, the cross-subsidization of local phone costs by long distance revenues, long claimed by AT&T itself, was lost.

Local phone service became increasingly expensive; by the late 1990s, the costs of installing household phones had run sufficiently high as to cause consternation on the part of advocates of lower-income groups. Pay phone access was similarly restricted through both higher per-call costs and the reduction in the number of phones available for public use. Fees were imposed for the use of directory assistance for the first time. Many consumer groups were left wondering if the nation's households were left off or not. No such self-interrogation appears to have occurred in the economics community.

Deregulation of the telecommunications sector also brought a massive restructuring of firms within it. Liberalization of ownership laws, which for decades had sought to mitigate the potential for oligopolistic control, was the proximate cause. New auction rules, implemented by the Federal Communication Commission (FCC) to allocate spectrums for wireless technologies, among their innovations, furthered the easing of governmental oversight of the industry as a whole. Allegations of bid rigging emerged almost as soon as the FCC arbitrage began. The economic expertise that had fostered the creation of these new auction procedures was absent efforts to police its equitable enforcement. Meanwhile, the many smaller companies spawned by the AT&T antitrust decision began, by the late 1990s, a merger initiative to reclaim both market share and its attendant control. The difference, this time, was that the federal regulatory apparatus to oversee such newly constituted large industry actors was gone.

In the health care industry, deregulation was less an issue, with the exception of proposals to reform product safety codes, than the pursuit of strategies to make the delivery of care more market-based than practice-based. With respect to the former, allegations that the Food and Drug Administration (FDA) had become "hostile" to business and a fetter on profitability in the pharmaceuticals industry dovetailed well with suggestions that new-product testing become more privately based. In response to industry complaints that FDA reviews were too costly and time-consuming, friendly politicians- no doubt inspired by the rhetoric of an economics profession increasingly opposed to government intervention in markets- took up the cause. Led by Senator James Jeffords, Republican of Vermont, the Congress began consideration of a bill to privatize FDA operations in the summer of 1997. That bill, if it had become law, would have allowed pharmaceutical companies to submit new products for inspection to private laboratories they themselves would have designated. So obvious were the corporate intentions behind this effort, the epitome of a laissez-nous-faire attitude grown more and more popular, that the relative silence of industrial organization economists on the matter was startling.

As for medical care delivery itself, the drive toward deregulation and privatization revealed a series of contradictions that remained unresolved throughout the 1980s and 1990s. Basing

medical practice on a cost-benefit calculus, framing it within the for-profit institutional setting of the health maintenance organization (HMO) and of “managed care,” raised a series of disturbing ethical questions and fostered increasing amounts of resistance on the part of consumers. Ironically enough, this in turn stimulated some efforts to reregulate the industry, although the outcome of those initiatives remained unclear. Leading medical economists, such as Uwe Reinhardt of Princeton University, along with their claim that only by imposing free-market incentives would the costs of medical care come down over time, increasingly attacked what they described as the “entitlement mentality” of Americans on the subject of health care. In this rhetorical design, of course, these scholars (even if unwittingly) linked their arguments with those of conservatives opposed to the welfare state agendas of earlier decades. No small part of the movement to render the health care industry more like its private-sector counterparts were the rising costs of Medicare itself in a nation in which the age composition of the population rose steadily from the 1970s onwards. Suggestions that greater proportions of Medicare practice be “profit-based” and that means tests be imposed on Medicare recipients only made more acceptable what had become a more and more common strategy of a federal government strapped for revenues- the imposition of “user fees” for various services once guaranteed to all under a progressive income tax system. Here again, the budgetary problems of the post-Vietnam War era provided the substratum within which a virtual revolution in both social policy and social science expertise (not to mention public attitudes) could take place.

Advocates of market-based practices in social policy also turned their attention to matters of environmental protection. Here, too, substantial segments of the American business community, by the 1980s, complained of an “overregulation” with respect to air and water quality, as well as occupational and consumer product safety, that excessively jeopardized the profitability of enterprise. That significant proportions of the workforce could be mobilized in this anti-government stance was testimony more to the anxiety working Americans had regarding the security of their employment than to powerfully held convictions about the virtues of free markets. Economic theorists again became indispensable participants in the conversation. The notion that direct regulation of “externalities” tied to particular economic activities was necessary precisely because no private allocation of liability was immediately possible in the unregulated marketplace was subjected to growing criticism. In its place the discourse of exchange took center stage. Specialists suggested that externalities be, like all commodities, instruments of commerce. They argued that firms whose production processes generated effluents or toxic waste, for example, should be free to bargain, both with government and with private households, as to acceptable levels of discharge. A polluter could then in principle pay a subsidy for environmental damage; those eager to protect the environment, in parallel fashion, might bargain over an agreed-upon level of payments to an establishment to cease and desist from particular activities. Inspired by this kind of reasoning, in 1994 the Air Quality Management District in the Los Angeles region instituted a program of “smog credits” whereby companies could accumulate points allowing for particular levels of air pollution in exchange for other environmental remediation (such as paying for the scrapping of old cars without catalytic converters). The general idea was market based: let pollution be bargained over like any other product. Private parties to that transaction, acting on rational incentives, would generate “optimal” outcomes.

As an instrument of alleged social reform, the free market became a canonical device in the hands of late-twentieth-century economic policy analysts. Deregulation of electricity transmission, privatization of prisons, proposals for “tax vouchers” to create a private market in schooling, the renewed construction of toll roads, suggestions that the postal service be

eliminated, trial programs to let private corporations run state welfare systems, experimentation with the privatization of social security accounts, contracting out local services to private firms- ranging from parks maintenance to air traffic control to public library networks-even the notion that various parts of the national security and defense apparatus be contracted out to the highest private bidder, all became and remain parts of a new economic “discourse” in contemporary America.

Yet, in perhaps the greatest irony of all, the profession that once prided itself on the refinement of the idea of “opportunity cost” had (and continues to have) virtually nothing to say of substance regarding the “opportunity costs” of privatization. On the one side, deregulated markets fostered the expenditure of vast sums of money on new promotional efforts to encourage consumers to shift services from one provider to another. Daily mail deliveries and frequent evening phone calls became the advance guard of a tidal wave of sales efforts and “come-ons” that presumably fostered competition in previously monopolized services but that also consumed greater and greater amounts of both company resources and households’ time and energy. At best, deregulation prompted confusion among targeted populations; at worst, it provided a venue within which corrupt practices could flourish. To respond in reasoned and informed ways to every proposal would have forced consumers to allocate ever- increasing amounts of already scarce time to their evaluation. For a vast majority of consumers it was not unreasonable to assume that the avalanche of competitive market information became an incoherent and often bothersome babble. Models of “rational expectations” were clearly not equal to the task of explaining this strange new reality. In this context, the warning of the ages – *caveat emptor* – took on an altogether poignant meaning. On the other side, deregulation restructured markets in ways that often stifled competition. By the early 1990s, local governments began to examine the practices of new entrants in major utilities sectors that seemed decidedly manipulative, if not based on overt conspiracies to restrain trade. In certain instances, proposals to “reregulate” industry met with attention hearings in local government agency. Over time it is conceivable that certain sectors may indeed be subject to new regulatory discipline, although such intervention will take place in the wake of a complete redistribution of particular markets among a new set of industrial actors. Viewed from this broad, historical perspective, deregulation in the late-twentieth-century United States was actually nothing of the sort. Far from an inspired political process of liberation, whereby an overweening state apparatus was chased from the field of energetic competitive enterprise, deregulation was actually an essential moment in the reregulation of the nation’s markets for the benefit of new corporate constituencies. Of this most remarkable development in economic affairs, the discipline that, more than any other, helped initiate the process has had nothing of importance to say.

Privatization also generated productivity losses and cost inefficiencies owing to the burdens it imposed on communities negatively affected by market restructuring. For example, in central urban areas where banking deregulation led to the liquidation of large numbers of branches, whole neighborhoods found themselves without banking service. In many cases this then prompted the proliferation of check-cashing and gyro- account storefronts that imposed high fees for their services. The same was true of the increasing use of automated banking machines. Aside from the direct cost consequences of these developments, the additional indirect burdens loomed large. Individuals might spend half to all of a day taking care of a variety of transactions that once could have been quickly secured at a local banking branch. In health care and day care, similar problems emerged in the wake of deregulation- serving only to increase the number of lost working days for a population already paying ever-higher fees for services once provided on a more universalized and thus cheaper basis. Perhaps in

this sense, contemporary markets should not be understood to have “privatized” but rather to have been “anomized” or “disassociated.” For a significant portion of the nation’s population, the effort to decollectivize the assignment of cost liability of an array of social “goods” had a significant impact on styles (and qualities) of life and levels of economic welfare.

By the late 1990s, no more dramatic example of the wholesale reorientation in the attitude of mainstream professional economists toward public policy strategies had emerged than that concerning information and statistics. The impulse to “deregulate” market environments quickly extended itself to the domain of data generation and distribution; with it, the urge to halt the government’s participation in the provisioning of timely and accurate information regarding economic performance followed as a matter of course. To the extent that economic statistics could themselves be conceived of as a commodity, it seemed logical that their “production” and utilization should be privatized. Suggestions that the statistical reporting activities of federal agencies such as the Department of Commerce, Department of Labor, and Council of Economic Advisers be terminated were seriously entertained. Individuals, households, and firms (not to mention government offices themselves) could, it was argued, purchase economic information from private econometrics practices. Superior statistical work would be rewarded, in such a market setting, while inaccurate and unreliable products would ultimately be driven out by the discipline of competitive enterprise. An econometric “shop” capable of delivering effective forecasts of, say, inflation, unemployment, and other significant parameters would find its services much sought after by consumers (within both households and corporations) eager to make appropriate allocative decisions. The converse would of course be true for those statistical operations less skilled and capable. This suggestion, that the statistical activities of government be replaced by the private venues of “normal” commerce, had the added virtue, in the eyes of its champions, of encouraging further shrinkage in the size and cost of governmental agencies themselves.

At the same time that proposals for the privatization of statistical reporting emerged, political leaders launched an ever-widening array of attacks on the actual process of economic forecasting within the federal government itself. Inflation-rate projections came under increasing scrutiny as their implications, for the payment of social security assistance, the adjustment of income tax brackets, the renegotiation of federal contracts over time (as well as the modification of private sector wage and price agreements), all captivated a Congress, and ostensibly a public, determined to reduce federal expenditures. Here, too, decades of criticism and cynicism about the economic activities of government took their toll. By early 1997, Senate leaders called for the establishment of an independent panel of “experts” to review and improve the ways in which inflation was measured. That for decades the Council of Economic Advisers, the Department of Commerce, the Department of Labor, and the Treasury had been entrusted with this important task, and that this new proposal was almost universally accepted, only gave further testimony to how frayed federal agency reputations had become toward the end of the century.

Speculative yet serious-minded late twentieth-century proposals to privatize the creation and dissemination of economic data brought this fascinating and intricate history to symbolic close. For professional American economists the essential mechanism in the working of a modern market system was the liberation of individual rationality, armed with the benefit of accurate and reliable information, to pursue chosen ends. Further, they argued so long as rationality was not somehow distorted or “bounded” in illegitimate ways, and provided that market information was consistently accessible to all, the outcome of competitive bargains would be the best possible for the largest number of market participants. Leaving the very

instrument of rationality itself, information and data, to the competitive discipline of the market emerged as a logical and coherent extrapolation of the essential argument in the first place.

Yet in the very effort to idealize the market and its operation, contemporary American economists had left aside the other part of the equation- the history that had seemingly made their ideas and practice relevant to and important for a public purpose. When, for example, U.S. secretary of Commerce (and later President) Herbert Hoover had insisted in the interwar years of the twentieth century, that government should provide free and accurate economic information for an enterprising and rational people, he had merely sought to operationalize some of the more rarefied claims of a modern economics itself. A half century later, in headlong retreat from the demands of a statist social science, American economists turned Hoover's insight on its head. In doing so, they substituted a crucial *precondition* of the proper workings of an unfettered market system for the product of the system itself. Human rationality, and the intelligence and statistics that were its necessary components, thus became not the distinctive premise of a modern science of society but rather mere articles of commerce themselves. American economists thus made products of what had been, for their discipline for many decades, their starting axioms.

Not the least of the consequences born of a century of professionalization in economics has been the determination of its mainstream practitioners to rid it of what they take to be political overtones. In place of the unabashed partisanship of its earliest and most illustrious architects –Francois Quesnay, Adam Smith, David Ricardo, Karl Marx, John Stuart Mill, Leon Walras, Alfred Marshall, and John Maynard Keynes, to name some – contemporary economists have fashioned a method of inquiry and a style of argument that reifies the workings of a “free market” to the status of natural law, Yet unlike their colleagues in the life sciences who, in their study of the structure and function of organisms, understand pathology and decay to be inherent in their subjects, these social scientist conceive the object of their study to abide in an immutable and generally healthy fabric born of what they believe to be “human nature.” It has been the strange logic of this particular doctrinal evolution that its proponents have increasingly argued against therapeutic intervention when markets have performed poorly. Allowing markets to function “naturally” has been their more common prescription – so unlike their counterparts in medicine and physiology who for centuries have honed instruments and techniques specifically intended to divert nature from its course.

Needless to say, the generally anti-public posture of the contemporary economics profession, and the policy frameworks it thus empowers and inspires, are not simply the products of the imagination or will but rather the outcomes of long-lived historical forces that have indeed spanned all of the last century. That today most economists believe in allocative outcomes – such as rising level of material welfare, high rates of empowerment, stable price structures, and vibrant patterns of technical progress – that the market cannot generate and indeed has never generated on its own is but the mirror image of the fact that, in its unregulated and un-manipulated operation, the market only betrays all that economists have ever imagined. Indeed, it is *this* reality that has, over the ages, inspired the discipline's greatest advances in theory and method.

Delivering contemporary economics from the dangerous and destructive theoretical impasse in which it is currently enmeshed requires both a new understanding of the “public” and the reconstruction of the discipline of public administration. Achieving these goals, as James Galbraith makes clear (“The Need for a New Public Administration”), requires the abandonment of the idea that governments only “intervene” in otherwise fully operable

markets. Far from functioning independently of public mechanisms, markets actually require the rules, limits, specifications, and orientations provided by government to function at all. If close attention is not paid to this reality, there is the obvious risk that the public contours of market mechanisms become desiccated and manipulated by private agents. This capture of the public interest by private aggregations of wealth and power then ironically emboldens mainstream theorists in their claim that “pure” market mechanisms always generate superior outcomes. Yet it is the inability to account properly for the manner in which markets and governments are intimately connected that prevents contemporary economics from identifying the true source of “market failure” in the first place.

An honest reflection on the capability of public entities to pursue well-articulated goals in effective and efficient ways requires that we jettison unquestioned assumptions about the “waste” of public offices and agencies. Janine Wedel (“Bureaucracy Shouldn’t Be a Dirty Word: The Role of People-Responsive Bureaucracy in a Robust Public Economy”) powerfully interrogates the assumption that all things “public” are, by definition, unaccountable to appropriate mechanisms of control and assessment. She notes that “true accountability” requires the use of properly conceived metrics, measurements that make sense of public needs, goals, and aspirations. This is an exceedingly important point that is shared among all the papers of this special issue – one to which we will return shortly.

That a truly useful and meaningful economics is tied to a comprehensive grasp of the public sphere and of statecraft itself is made vivid in both historical and present-day settings. Victoria Chick (“Industrial Policy, Then and Now”) destabilizes the notion that government is “inefficient” as compared to private market practices. Comparing the interwar twentieth century British policy with respect to industrial development with that of the current Tory government, she finds that the assertion of an *a priori* distinction between the public and the private is both unfounded and subversive of a genuine understanding of the role and impact of government in economic life.

Similarly, Michael Lind (“Putting the Nation-State Back In: Public Economics and the Global Economy”) is concerned to understand how government decisively affects technological change in the modern economy. By exploring the manner in which geopolitical dynamics frame economic policymaking, he debunks the notion that the economy is somehow a timeless, abstract realm within which “market behaviors” express themselves. To the contrary, it is the competition among nations (for resources and political and diplomatic influence) that most dramatically influences policy choice. And it is the policy decisions of government that then powerfully delimit the manner in which innovation is both generated and diffused around the world.

The active and intentional creation and shaping of markets, and the consequent impacts on the generation and distribution of wealth, are also key aspects of state action in the economic arena. Mariana Mazzucato (“The Entrepreneurial State: Socializing Both Risk and Rewards”) puts the lie to the notion that government is merely the “fixer” of market failures. On the contrary, public actions demonstrate the fact that the state is a “market-maker,” actively determining the avenues within which investment (of both public and private funds) will be deployed. Utilizing the examples of the aerospace and pharmaceutical industries, Mazzucato shows that the public sector, far from intervening to repair “failures” in otherwise well-functioning markets, government agencies and laws have actively determined the pace, pattern, and dissemination of new technologies, new products, and new distribution mechanisms in both national and global contexts.

In thrall to the dominant catechism of neoclassical economic theory, the vast majority of investigators assume that private markets, if “perfectly” structured and operationalized, will always generate more efficient outcomes than public provision. Yet empirical evidence, drawn from an array of national and regional examples, proves otherwise. David Hall (“The Relative Efficiency of Public Provision of Public Services”) is able to demonstrate this fact with remarkable clarity – and with large stores of data drawn from both highly developed and currently emergent economies. His are a particularly striking set of findings insofar as they strike at the heart of the unsubstantiated pronouncements of orthodox theory regarding the alleged virtues of unfettered markets – in both “private” and “public” settings.

Reconstructing a public economics is obviously a task that requires a broad and capacious understanding of the interactions between markets, public entities, and the domestic sphere, as well as an understanding of systems theory, and a willingness to embrace, rather than ignore, the biophysical realities of economic activity. If nothing else, the essays assembled here demonstrate this. Yet it is also worth noting another, more technical implication of these contributions. Much of our current inability to understand the intricate connections between the public sector, the market economy, and the domestic and environmental spheres is tied to the difficulties we have in properly measuring and accounting for the activities within these various realms. What we count, and how we count it, has as much to do with our conception of the world within which we live as any theoretical framework. Measurement is all. When we say a particular array of activities or policies are effective, we are claiming they are better poised to achieve certain goals and outcomes. Yet how we do know this to be a fact? Cogent and accurate assessment of economic outcomes necessitates not only the gathering of relevant data but also the identification and measurement of precisely those variables that speak directly to the question at hand. What we measure, and how we measure it, essentially determines what we know and decide to do.

A projection of profitability that ignores “externalities” of a production process associated with nefarious environmental impact is not a useful datum. It is at best incomplete, at worst decidedly misleading. Labor market studies that ignore the implicit bias, framed by “signaling” associated with ethnicity, gender, age, or even regional origin, are not investigations that will clearly and effectively reveal the origins of unemployment and underemployment. Estimates of GDP, in both developed and developing economies, that fail to account for (and thus measure) the contributions of unpaid domestic labor in households, are statistical projects that teach us less rather than more about national income accounts. These and countless other examples demonstrate the many ways in which much of economic analysis today is anchored on the shifting sands of unexplored and unexamined assumptions about measurement.

The essays collected in this special number of the *RWER* show that the re-framing of contemporary economics required in any genuine effort to understand the public realms of economic activity and purpose is a significant endeavor on both theoretical and empirical grounds. Reconstructing a public economics beckons us to a wholesale restatement of the ways in which the economic system is assembled. It draws our attention to the manner in which constituent parts of the economy, ignored in mainstream thinking, actually drive concrete allocative outcomes. Such a rethinking also draws out attention to the need to redefine and evaluate the mechanisms of data-collection and measurement that generate the very determinations by which we judge the efficiency and efficacy of policies and rules. It thereby transforms our appreciation of the salience, importance, and impact of public

economics, a realm which literally defines the social world in which we live, and which animates any meaningful perception of the means by which we might strive to improve it.

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There is more than one economy

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Abstract

Human economies can be understood in more than one way.

- The **private business economy** is what economics textbooks are generally about.
- The **public purpose economy** consists of governments and their agencies as well as non-profits and international institutions like the World Bank or the United Nations. The public purpose economy is a collection of institutions that are justified by their stated intention to act for some broader good than their own profit or enrichment – though they may differ widely in their definitions of what is "good".
- The **core economy** is where households and communities carry on their internal activities of production, distribution and consumption. The core economy's justification and purpose is the survival and well-being of its members. It is located in home, family, and neighborhood; places that function as markets for emotional, social, and civic transactions. This paper will consider some distinguishing characteristics of these three economies – in particular: their goals or justifications; what currency they use; what kind of demand they respond to; and how they define and reward work.

The second half of the paper will offer reflections on the harms caused by an excessive dominance of the private business economy over the other two, with thoughts on some of what will be required to redress this balance. It will conclude with an image of a healthier relationship between humanity and our natural environment – a relationship that will inevitably come about, whether we choose to move into it positively, or are forced into it by breakdowns in all of our economies resulting from natural and social disasters.

Part I. Several economies

Economics textbooks imply that there is only one economy worth talking about: A private business economy, which is described as being pushed, by its own logic and internal forces, toward a competitive outcome that is ideal, in the sense of efficient use of resources to satisfy the needs and wants that are expressed through purchasing power. However, in the twenty-first century a more pluralistic view has gained ground, partially propelled by ecologists who insist that our economic behavior is embedded within, and completely dependent on, another economy – what Darwin called the economy of nature. That is a system in which production, distribution, and use of materials and energy is carried out with such seamless efficiency that there is virtually never any waste: the output of each part of the total, ecological process is the input to another part.

Ecological economists are probing the market's inability to value adequately the common gifts of nature whose importance is not reflected in their price. At the same time, comparable to Adam Smith's famous paradox of costly diamonds and free water is the market paradox of high-paid stock-brokers and low-paid nurses. Both of these are paradoxes in the sense that they make us think about the difference between market value and some other set of values: "Can I do without diamonds? Without water? How is my life affected by stockbrokers, in comparison to the person who helps care for my ailing parent, or who will be there for me when I am ailing?"

Difficult though it is to imagine operating in a world where the per-ounce price of water rises higher than that of diamonds, it is equally difficult to imagine rearranging our private business system to pay nurses what stock-brokers earn. The prices set in the market can be explained in the private business context, especially when we bring in issues of history, class, gender, ethnicity, and political power (issues that have normally been omitted from 20th-century economic theory). It is considerably more difficult to make sense of private business values (i.e., prices) when we think of them in relation to our human values. In today's world wherever the two value systems come into conflict, the market almost always seems to prevail. And yet, there are already several other economies that are operating in important and vigorous ways – though they all show signs of deterioration as they rub up against the power of private business.

In addition to nature's economy (which will not be my focus), I will describe three major spheres of human economic activity.³

1) The **core economy** is where households and communities carry on their internal economic activities of production, distribution, consumption and resource management. Often economists have depicted people in the core sphere solely in the roles of consumers and workers, and even then only paying attention when this sphere interacts with businesses. Outside of textbooks, however, it is hard to avoid recognizing the critically important economic activities of the core sphere, which include raising children, securing food, maintaining homes, caring for ill individuals, and organizing leisure time and other resources.

When the core economy is working effectively to support human well-being, important goods and services are provided to many, many people, even if the scale of production in each specific case is quite small. Because most core sphere activities involve face-to-face interaction, the core economy is also the primary location in which good social relations are developed. But it is under tremendous pressure – in some ways more today than ever before, as the private business economy drains it of people and resources. Moreover, the requirements of caring for children or for elderly and ill people can sometimes overwhelm the personal resources of families and communities. One extreme example is the situation of families and communities in sub-Saharan Africa trying to care for the large number of children orphaned by HIV/AIDS or by war, without adequate resources to feed and clothe the children, let alone provide for education and physical safety. There are limits to what can be accomplished within small-scale, largely informal networks of personal relations. For many economic and social goals, more formal and larger-scale organizations are also needed. These are often found in the public purpose economy.

2) The **public purpose economy** consists of governments and their agencies; non-profits such as charitable foundations and social service organizations; and international institutions like the World Bank or the United Nations, along with their agencies. Some of the larger public

³ Economist James Blignaut, reviewing this paper, wrote:
There are at least four more economies actively at work:

- The informal economy (big in Africa, not part of either the market or the core economy)
 - The shady (or illicit) economy (poaching, human trafficking, money laundering, fraud – it has become big business)
 - The externality economy (that which is part of economics, but not part of finance, such as pollution, degradation, etc. – obviously there is a link to the shady economy i.e. poaching and ploughing in a wetland without authorization)
 - The invisible e-economy (global financial e-trade).
- (Email correspondence, 2/25/18.)

purpose organizations, often associated with some level of government, are charged with purposes such as defending a country's borders, relieving poverty, protecting the natural environment, and stabilizing global financial markets. Religious organizations are normally treated in law as public purpose organizations. Small and large nonprofits exist to promote various causes, ranging from protecting natural resources, to providing shelter for homeless people, to lobbying for equality based on race and sexual orientation.

The public-purpose sphere has its weaknesses, of course. Institutions in the public-purpose sphere are sometimes accused of being rigid, slow to adapt, and inefficient because of excessive regulation and a bloated bureaucracy. Organizations can lose sight of the intrinsic, common-good goal of providing "public service" and become more focused on increasing their own organizational budget. Because public-purpose organizations are commonly supported by taxes or donations that are often not tightly linked to the quality of their services, they may not have financial incentives to improve the quality of what they provide. Many current debates about reforms in governments and nonprofits concern how incentives for efficiency can be improved without eroding these organizations' orientation toward providing goods and services of high intrinsic value.

Some of the goods and services provided by the public purpose economy are what economists call **public goods**. These are goods (or services) that are freely available to anyone (or some people could be excluded from using them, but only with difficulty), while use of a public good by one person does not diminish the ability of another person to benefit from it. Public health is a public good, as is national defense. A system of laws and courts provides the basic legal infrastructure on which all business contracting depends. Preservation or restoration of natural amenities, as in the case of parks or roadside beautification, is most often undertaken in the public purpose sphere, by either nonprofit groups or by governments.

There are two basic function of public-purpose organizations. One is to **regulate** economic activities – that is, to set the standards and "rules of the game" by which other economic actors "play" – so as to create the legal, informational, and social infrastructure for economic activity. Many people think of "regulation" entirely in terms of "government regulation," and it is true that the governments set many of the rules and standards with which other economic actors are legally obligated to comply. However, many nonprofit groups participate in regulating economic activity, particularly in the area of standard setting.

The other basic function is **direct public provision**, often used to supply goods or services that cannot be supplied equitably or efficiently either by private individuals or through the market. Some things are provided by the public-purpose economy because, as a society, we believe that everyone should have access to them, regardless of the kind of family or community in which they were born, and regardless of their ability to pay. In the US public schooling from kindergarten through high school is a prime example of a public good that is provided through direct public provision by government, while alternative options, with varying price tags, are also supplied by nonprofit organizations, by the core sphere (as in home schooling) and through the private business sector. Examples of direct public provision by government in other countries include health services for all, or various kinds of support for families. Hospitals in the United States are variously operated by nonprofit, government, and for-profit entities, and thus may be in either private business or the public purpose economy. Support centers for battered women, playgrounds, small or large museums, or the Little League, may not immediately come to mind when we think of direct public provision, but they

are also examples of what is provided by this economic sphere. Some of these could arguably be located in the community sector of the core sphere – for example, when a neighborhood parent volunteers to coach a youth baseball team in conjunction with the more formally organized Little League activities.

3) The **private business economies** are what most economics textbooks focus on, virtually excluding the first two. The private business sphere of economic activity consists of firms that are normally expected to look for opportunities to buy and manage resources and production processes in such a way that, after the product is sold, the owners of the firm will earn profits. Standard, twentieth century economics pays some attention to different kinds of institution that actually exist within the recognized market sphere. Three of these types of distinction will be mentioned here, but given little attention hereafter.

- There are the markets in which goods and services are bought and sold; vs the financial markets in which money flows, often without playing a direct role in the production or exchange of goods and services.
- There is the portion of the market that to some degree fits within the assumption of competition found in economics textbooks; this includes many of the small businesses whose generation of jobs is far larger than their relative economic power, as a group. A large non-competitive counterpart to competitive markets is the “corporate command economy”, consisting of huge islands of coordinated activity within multinational corporations wherein transactions are protected from the stormy seas of competition outside their bounds.⁴ There are also monopolies and oligopolies, both large and small, which use power or location or other means to escape the forces of competition which are supposed to force markets to behave in ways that maximize consumer satisfaction.
- There are also black market economies, sometimes operating with huge power and profits, other times being viewed as “black” simply because they are so small they manage to operate under the radar of governments, often avoiding taxes and regulations.

Goals, currency, demand and work

I will consider some distinguishing characteristics of these three economic spheres just summarized – in particular:

- a) their goals or justifications;
- b) what currency they use, and how it relates to human values;
- c) what kind of demand they respond to; and
- d) how they define and reward work.

Goals

It is worth noting, here, some widely accepted assumptions that hinge on the distinction between “ultimate” (or “final”) and “intermediate” goals. The activities of the core economy directly address the ultimate human goals of survival and well-being. The private business economy produces goods and services that are sold as though they would promote these goals; but there is a significant indirection here. Theorists of the private business economy have offered “economic growth”, “growth in GDP”, and the profits that feed such growth, as

⁴ It has been estimated that trade within MNCs, called intra-firm trade, accounts for about one-third of total world trade. See Multinational Corporations in the Global Economy, <http://www.unc.edu/~toatley/mncs.pdf>; downloaded on 6/25/17.

though these things were ends in themselves. They are not. They are only means to humanity's final goals.

Actors in the **private business economy** are expected to adopt profits as their primary – often (for example, in the writings of Milton Friedman) – their only goal. In fact, firms may not always aim for the highest profit, for two main reasons. One is that some business managers cite being a good “corporate citizen”, with regard to their workers, communities, or the environment, as a motivation for some of their actions. Also, businesses organized on a cooperative model (including large food-marketing organizations such as Land O’Lakes for dairy products and Ocean Spray for cranberries) explicitly state their purpose in terms of providing services to their members, rather than in terms of profit. Still, it is ordinarily necessary for each business to make enough profit to stay afloat.

Second, within a modern corporation, the activities of the firm represent the interests of many people, including its stockholders, board of directors, CEO, mid- and top-level managers, and employees. The interests of these various individuals and suborganizations may be in conflict. Sometimes top officers and managers may act, for example, not in the profit-making interest of the owners but according to their personal self-interest. That is, they may seek to maximize their own prestige and incomes, even when this goes against the interests of everyone else involved in the firm, including those who have invested in it. Profits, and even the long-term survival of the company itself, may be sacrificed in a race for individual high salaries and lucrative bonuses.

When firms act to enhance social well-being – for example, by making decisions that consider the full needs of their customers and their workers, as well as taking into account externalities – they may be guided in these directions by the goodwill of their owners and managers, by pressure from their customers or workers, or by government regulation. However the logic of private business production has no *built-in* correction for externalities that are generated when the actions of a firm harm some other actor, but do not affect the firm causing the harm. Symmetrically, benefits generated by a firm that are not entirely captured by that firm will not be given much consideration in the firm’s plans. An example of such positive externalities is the increase in knowledge and skills that results from a good training program. The firm will put fewer resources into the program if they expect that many of those who are trained go off to use their skills elsewhere. Indeed, a way to remember the meaning of the term “externalities” is to understand that it refers to things that are external to the market⁵. Government regulation against pollution, and training programs created by government or by non-profits, are ways that the public purpose sphere works to offset the existence of positive or negative externalities in society – to get more of the good things the private business can provide, and less of the bad.

The profit motive is often lauded because, by focusing the attention of a firm on a single bottom line, it is thought to create greater efficiencies, as well as strong motivation to innovate. However, just as the desire to make profits can lead a firm to externalize costs onto the rest of society, the pressure to innovate can also take a perverse form. Leading up to the global financial crisis in 2007, financial firms created “innovative” investment products by

⁵ Non-economists often criticize economists for using this term, on the assumption that if these harms or benefits are called “externalities” that means they are considered unimportant. On the contrary, economists recognize that the presence of significant externalities invalidates a large part of the framework for believing that market solutions are socially optimal. They may wish to downplay the presence of externalities, but the concept is taken very seriously.

bundling risky mortgages and selling them as safe investments. When the crisis hit, many of these investments were finally revealed as being nearly worthless.

The theoretic ability of markets to produce optimal results rests on a number of assumptions. In addition to the assumptions of perfect competition and the absence of externalities, perfect knowledge is assumed on both sides of a transaction. Power is not considered as a possible cause of information asymmetries. In fact, however, in fields such as for-profit health care and education, the “buyers” may be unaware of the quality of the services. For example, a 2016 analysis of students who attended for-profit universities found that they would have been better off attending lower-cost community colleges, in terms of both their salaries and student debt.⁶ The potential for social harm grows when firms gain excessive market power – that is, when they come to dominate the market in their area. They may be able to charge socially inefficient prices or to squelch innovations by competing firms. Large firms also have considerable power to harm the natural environment on which they ultimately depend. Thus market economies today face a major conundrum: how can societies continue to benefit from the strengths of the market economy while ensuring that this sphere supports the well-being of current and future generations? This question forces us to think about what goods and services should be provided by the business sphere, and which ones should instead be provided by either the core or public purpose sphere.

Perhaps the most striking difference between the private business economy and the **public purpose economy** comes out in the term by which some of the latter’s members are often described: “non-profit”. The distinguishing characteristics of these institutions is that they exist for an explicit purpose related to the public good – that is, the common good of some group larger than a household or informal community – and they do not aim at making a profit. Like institutions in the core sphere, those in the public-purpose sphere can provide goods and services of high intrinsic value, but (unlike core institutions) they are big enough, or sufficiently well-organized, to take on jobs that require broader social coordination. Unlike in the business sphere, the provision of goods and services itself, and not the financial results of these activities, remains the primary intended focus of public-purpose organizations.

Because definitions of “the public good” vary, some people may reject the mission of certain organizations. For example, it is possible to find nonprofit organizations that are thinly disguised hate groups. Trade organizations and labor unions promote the interests of their own members, while other members of society may disagree with their agendas. A continuing issue with government institutions is the question of *whose* interests are represented – the majority, minority groups, or special interests who donate money to campaigns? Yet, because of many important functions of the public purpose sphere, the question isn’t whether to have a public purpose sphere but how to make it operate as efficiently as possible, while serving human well-being as inclusively as possible.

The **core economy**’s justification and purpose is the survival and well-being of its members. It is located in home, family, and neighborhood; places that function as markets for emotional, social, and civic transactions. It is here that children are raised, food is secured, homes are maintained and lived in, and the first line of defense is maintained against sickness, sadness and anti-social behavior. With this said, it is also worth noting that a particular entity in the core sphere – one household, or extended family, or a particular community – may act with concern only for the members within its boundaries, however it defines them. As an example,

⁶ Cellini and Turner, 2016.

not all families can be counted on to keep the flu to themselves; their own needs may result in sending sick children to school. The public purpose sphere is needed in such cases, to provide inoculations against communicable diseases, and, where possible, ways of caring for sick family members when the adults of the family have to be off at work. Similarly, communities have often banded together to prevent people from other races or religions from purchasing homes there. In such cases, if such unfairness is to be blocked, then the public purpose economy needs to confront the core economy.

Currency and value

Money (and the ever increasing number of forms it can take – electronic, etc.) is the currency that is taken for granted in the **private business economy**.

The **public purpose economy** also usually uses money as its medium of exchange, so that it is often reasonable to refer to this and private business as “monetized” economies. In some instances public purpose organizations offer goods and services for sale as businesses do, but they usually raise most of their support by soliciting monetary contributions or, in the case of governments, requiring such contributions in the form of taxes or fees.

An exception to the monetization of the public purpose economy is its use of volunteers. Here, in theory, there is no exchange, and hence no need for a medium of exchange: the volunteers give, they don’t get. However, the public purpose economy is suffering from an ambiguity. Its goals are closely allied to those of the core economy, and its principles of volunteerism look like the principles on which the core economy operates – but, as I will note under the topic of work, there are significant differences. In fact, copying the currency of money from private business, and trying to copy volunteering from the core, the public purpose economy is often misled and confused by both.

One example of the encroachment of the private business economy mentality is a growing demand that the public purpose economy should compare – and therefore quantify – costs and benefits before taking action. This mind-set is found in the kind of “accountability” that charitable foundations are increasingly demanding from their non-profit beneficiaries. It is also expected that governments should, for example, show that efforts to curb greenhouse gasses will produce quantifiable benefits greater than the costs. There is an unfortunate asymmetry in the fact that, in anticipation, it is usually relatively easy to quantify costs, and relatively difficult to quantify benefits; and there is a temptation to assign a zero value to that which cannot be quantified. Imagine that we are looking, from the year 1900, at the investments the government might propose to make in public parks or public education. How could anyone have known in advance the money value of our systems of these systems? If such proof had been required, would ARPA have invented the internet? How much government R&D would get funded?

The **core economy** hardly uses money at all in its internal transactions (exceptions tend to be small, as when kids’ allowances are tied to doing chores). Core transactions are embedded in networks of intimacy, identification, and reciprocity, so that – when the core is operating in its healthiest form (which is by no means all the time) – “suppliers” of goods and services in the core do not feel depleted. This suggests some kind of exchange.

Some parts of this exchange can be understood as barter: “I’ll cook if you do the dishes”. In many cases, however, what is “supplied” by one person, at one time, feels more like an

exchange because this person knows that she will get her “demands” met, though likely at a different time, and not necessarily from the same person. An example is the care we give to old people (who may or not be our parents), in the hopeful expectation that we will receive similar care when we are old, from others in our circle of neighborhood and family (who may or may not be our children). It is not easy to define the currency that operates to permit these non-barter exchanges. It might be love; sometimes it is guilt; or it could go by names such as obligation, responsibility, or neighborliness.

How significant, economically, is the core sphere? The 1995 *Human Development Report* of the United Nations Development Program compared quantifications of economic activity around the world with estimates of unpaid productive activities of women and men – activities whose results were intended for household use, for the benefit of the community, or for non-monetized exchange. The report found that, globally, only slightly more than half of the total time spent on “economically productive activities” was going through formal markets and reported in standard income measures such as Gross Domestic Product (GDP). A wide range of other estimates – from those of the conservative Chicago economist, Gary Becker, to feminist economist Nancy Folbre – similarly find that in the U.S. at least 40% of the productive work (measured in hours) goes on outside of the money economies.

Looking just at elder care, a 2014 Rand study using the opportunity cost method said the cost for informal caregiving of elderly people by friends and relatives in the United States comes to \$522 billion a year. That is larger than all of Medicare spending in 2014 (\$449 billion) and more than twice the \$211 billion now spent in the private business and public purpose economies together for commercial homemakers – who are paid at an average rate of \$11 per hour. But the work described here was not paid for with money.⁷

Demand

When economists talk about “demand” they mean people’s desire to have things; but the **private business economy** can only perceive, and respond to, a special kind of demand. “Effective demand” is the desire *and ability* to purchase something at the going price. If your wants aren’t backed up by enough money, they aren’t effective – in an economy that is dominated by private business.

The demands that can be heard or seen by the other two economies are not so restricted. Both the **public purpose** and the **core economies** are sensitive to *needs*. They are also, of course, sensitive to wants that might not be defined as needs (a murky distinction to make, in any case), and there are various kinds of pressures that can make these demands (both wants and needs) more “effective”; some people are better at making their needs heard than others.

In the case of governments responding to their constituents, again some voices are more effective than others; this differential may be defined as power. Charitable organizations are often designed to respond to specific kinds of needs – but, again, there are differences

⁷ A summary of the paper adds: “Replacing that care with unskilled paid care at minimum wage would cost \$221 billion, while replacing it with skilled nursing care would cost \$642 billion annually.” “The Opportunity Costs of Informal Elder-Care in the United States: New Estimates from the American Time Use Survey” by [Amalavoyal V. Chari](#), [John Engberg](#), [Kristin Ray](#), [Ateev Mehrotra](#). Published in: *HSR, Health Services Research*, v. 50, no. 3, June 2015, pp. 871-882. Posted on RAND.org on January 01, 2014.

among the “needy” in how well they can make themselves heard. And the confusion in the public purpose economy, deriving from the large role that money plays, often places a significant requirement for private business-type “effectiveness” on the demands to which it attends, when it mimics private business in selling its services. Examples include non-profit hospitals that require payment before service, or (more subtly) garbage collection that is more frequent in the high-tax areas of town.

Work and compensation

In the **private business** economy there is a theory of wages which says that every worker should be paid exactly the amount that his or her work adds to the employer’s revenue (the “marginal revenue product”). The reality is, indeed, rather different from the theory; but anyone who has taken an introductory economics class knows that this is how the system is *supposed* to work.

In the **public purpose** economy, revenue (or profits) is not the defining issue, so the workers’ contribution to revenue cannot be used to justify what they are paid. However, the public purpose economy is currently in a state of great insecurity about its identity. It is criticized for inefficiencies (some of which are real, while others are invented or greatly inflated by those whose self-interest is served by diminishing government), and told that it needs to more exactly imitate the private business economy. In attempting to obey these injunctions, institutions in the public purpose economy feel pressure to define their workers’ productivity and to set compensation accordingly. But the value of the things they are producing – from environmental quality to day care, from prisons to trade agreements – usually isn’t defined by a price tag, and is normally hard to quantify. Given the contemporary mood, which holds up market pricing as the best gauge of all value, this puts the public purpose economy at a disadvantage, not only in its employment policies, but in many other ways.

Nor is volunteering the solution to this dilemma. That approach copies what appears to work in the core economy, by replacing a money exchange with rewards that may be thought of as a sense of purpose, or meaning, or human value. Indeed, there is much satisfaction in being needed, in doing for others the things that make human life possible and worth living. However, there are several problems in the relationship between the volunteer and the recipient of volunteer help. One problem is that the volunteer earns (and may even depend on) a kind of moral superiority, precisely because the relationship is set up on the assumption that nothing is given in return. The recipient, at the other end of this one-way relationship, loses dignity and self-respect when the role is understood as *only* that of recipient. And even the most morally superior volunteers can burn out if they feel they are only giving, never getting.

The more obvious problem with volunteering is that not everyone can afford to give their time for free. Relatedly, public purpose organizations often pay lower than the going market rates precisely because they recognize that people are attracted by the psychic rewards. Since wages are, in fact, not only set by “marginal revenue product”, but are also strongly affected by norms, the tradition of paying government and non-profit workers below what they might expect in the market can set up a vicious cycle, in which low pay attracts not only idealists but also people with low skills or motivation, thus providing examples of poor performance that can be pointed to, to justify the low wages. Anti-government sentiment in the United States is promoted in a variety of ways, essentially with the goal of moving ever more government functions into the private business sector where firms can profit from taking them on. This

anti-government sentiment is reinforced when people can point to the poor response they have received from underpaid, demoralized public servants.

How are workers in the **core** economy compensated? Partially, their work contributes to their own well-being and comfort. However, much of this work benefits people other than the worker (the sick friend or relative, the young child, the family members who eat meals they did not prepare, etc.). There is a growing literature on the “caring labor” that may be unpaid, as in the core, or else is usually underpaid, when it flows through one of the other economies. While markets value what is rare and specialized, human survival and human values derive from the basic, generalized skills that are built into our human nature. This – along with issues of relative power – explains the terrible paradox of economics: That the most critical activities of humankind are those that receive the lowest wage – or none at all. Thus, a money-skewed value system gives rise to a skewed definition of work. Raising children, strengthening families, creating safe neighborhoods, taking care of senior parents, and the various works of citizenship are defined, in money terms, as the lowest level of work – or not seen as work at all.

The values that are represented and nurtured in the core economy are often ones that are subscribed to by the public purpose economy; but the latter hasn’t been able to break out of the wage-equals-value mentality. As the public purpose economy allows itself to be judged by the standards of the private business economy it accepts a production mode in which workers are treated like factory workers, producing “public goods” that are supposed to be measured.

Part II. Dangerous imbalance among the three human economies

There are many ways of describing what’s wrong with our society today. One view is that the private business economy is dominating the other two economies to excess, and in unhealthy ways. The simplest, single way to describe why this is bad is to note the effects of corporate management pursuing short-term profit regardless of the cost to society, now and in the future.

Problems for society exist not only in the relations among the three economies, but also within the private business economy itself. These include concentration of power and resources, and destructive and demoralizing relations between owners of capital on the one hand, and workers and communities on the other. More broadly, there are powerful business actors that, significantly more than actors in either of the other economies, are creating massive, global externalities that seem likely to be destructive of human civilizations, human wellbeing, and ecological stability.

Concentration of market power in firms is a problem that has a well-known textbook solution: Governments should regulate industries to preserve the competitive character of markets, in order to maximize efficient use of resources and minimize costs to consumers. In cases where economies of scale make it inefficient to have more than one or a few firms in a given industry, then the monopolistic or oligopolistic firms must either be owned and managed by government, as representative of the people and their welfare, or strictly regulated so that they serve the public good without extracting excessive profits.

Comparing the textbook solution to today’s reality is laughable; over recent decades government bodies designed to regulate industry have been defunded, stripped of power by

changes in policies, and increasingly peopled by individuals who openly represent the interests of the industries they are supposed to regulate.

There is not, by contrast, a standard textbook solution to destructive relations between corporations and their employees or neighbors. These malign relations include norms of compensation such as the grotesque differential between compensation paid to workers and that received by CEOs. They also include norms of decision-making about layoffs as well as plant locations and closings that are entirely based on calculations of profit, without consideration for human impact. These issues are not covered in standard economic discourse (as exemplified by mainstream “neoclassical” textbooks), since they are outside of the assumptions of competition, which is supposed to result in “fair” compensation (i.e., wage = marginal revenue product). More broadly, neoclassical economics has depicted the market economy as a free-standing entity, neither affecting nor affected by its social or its physical environments.

Some types of corporate malfeasance occur where the major harms are created in the course of the production process. Examples include manufacturing systems where competitive pressure in the absence of offsetting norms or regulations result in terrible abuses of workers; or various extractive industries (e.g., mining, and other competing uses for land) where an industry (often with the backing of foreign money and power) takes control of land and resources through violent means. There are other cases where the main harm is caused by the product itself; for example, the financial industry, which created complex financial products that were a major cause of the crash of 2008. This example is of special interest, because such a large proportion of global financial capital is tied up in the financial system, where it is most often not producing any real goods or services, but is simply enriching a small group of individuals, contributing to growing wealth inequality around the world.

These bare descriptors – unproductive uses of capital, and growing inequality – point to a host of deep social ills related to incentives and value systems in the private business economy that promote anti-social, anti-future behavior.

The global externalities created by the private business economy may be called meta-externalities, insofar as they emanate from – and ultimately affect – the whole system as well as individual actors in it. **Meta-externalities are unwanted side-effects of the whole economic system on its physical and social contexts** – side-effects in which the economic culture fouls its own nest, if the “nest” is understood broadly as all the contexts in which we humans live. They include the social ills of inequality and anti-social behavior, as well as the environmental disasters of global climate change; depletion of stocks of fish, forests and other biota; depletion and/or degradation of fertile soil and clean water; and the toxins and nonbiocompatible wastes that are building up in huge quantities throughout all the Earth’s ecosystems.

The totality of the contexts in which we humans live are also the contexts that, for better or worse, create the conditions for future economic endeavors. A business woman commented to me, “when you talk environment, I think supply chain”. She could also think “customers”, since global conditions affect global economies, hence people’s wealth and their ability to make purchases.

Consider the incentive structure for a producer of oil or gas. Their short-term interest is obvious: at any time, they will maximize profits by putting off the transition to a time when less

of their products are used, overall, due to increased efficiency and conservation – that is, by putting off the transition to the post-carbon world of solar, wind, tidal, hydro and geothermal energy. In the meta-context, the longer the world relies on carbon fuels, the worse will be the effects of climate change. We no longer need to stretch our imaginations very far to look ahead to environmental refugees, hunger, poverty, sickness, and war. These things are seriously bad for business. (Almost all business, that is; there's always someone who can make a killing from disaster.)

Considerations of this sort are the crux of the shareholder engagement activities I have been involved in, with many others, over recent decades: trying to persuade the directors of oil companies, in particular, that they are so seriously fouling their own nest – the world – that they will suffer not only losses but serious retribution. The requirement that is emerging from macro disasters, like global recession or climate change, is the need for investors to think systemically about how business in general is affecting the world of the future. Unfortunately, such shareholder activism has had minimal impact on most of the targeted companies. While public opinion in general is beginning to connect the dots between corporate selfishness and social/ecological problems, still, in the short term, while the music is playing the CEOs continue to dance, arrayed in their huge profits.

Of course, not only the private business economy and private actors are implicated in the terrifying meta-externalities of the 21st century. While the private business economy is the basic source of these meta-externalities, consumer behavior in the core economy has carried out much of the private business agenda, while corruption in government has failed to block it.

It is normally in the core economy that human values, such as concern for others, and for the future, as well as biophilia (as described by E. O. Wilson), are developed. Unfortunately there is a feedback loop between private business and the core, wherein the formation of values is strongly affected by the omnipresence of commercial images of what to admire (the richest person, the most extravagant life-style) and what to strive for (material possessions, and status that is closely tied to ownership of things). The replacement of thrift with conspicuous consumption, and of concern for integrity with concern for winning, are examples, in the cultural context, of meta-externalities that emanate from the economic system we now have.

From a sales point of view, the short-term self-interest of business is served by a consumer-oriented culture of instant gratification and simplified thinking that urges material purchase as the answer to any discomfort. Sales are increased through advertising that promotes selfishness, short-term thinking, cynicism, and impatience with complexity. Responsibility is not high among the values that look cool and appealing in modern advertisements; but productive enterprises need a workforce that can defer gratification, think creatively, and be honest and responsible. This is the cultural nest that is being fouled by businesses that ignores the fact that consumers and workers are mostly the same people.

The public purpose economy has also been corroded by private business dominance. I have mentioned, and other papers in this collection will give more attention to, the unfortunate results of governments and non-profit organizations striving to look more like players in the private business economy – for example trying to base all decisions on monetary cost/benefit calculations, requiring an attempt to quantify unquantifiable inputs and outcomes. At the same time, the ability of governments, in particular, to fight back against corporate overreach has been severely reduced by the defunding, policy changes, and personnel issues mentioned earlier.

For much of history, humans lacked the power to overstep nature's limits; in those instances where, for example, destruction of soil fertility doomed farming systems, those civilizations simply disappeared, leaving no obvious record of what had gone wrong. Over recent decades, however, as even establishment groups have joined a virtually unanimous scientific community in warning that global climate change is likely to be the worst environmental crisis ever faced by humanity (e.g., the 2006 *Stern Review on the Economics of Climate Change*), ignorance can no longer explain the failure to take appropriate action. Just as the tobacco companies successfully fought for 30 years to hide the health effect of their products, the fossil fuel companies have known since the 1970s about the disastrous climate consequences of continued use of their products; yet over several decades they mounted a successful campaign to confuse the public about this subject. Other examples abound, of corporations continuing to market products whose overall effects are far harmful than beneficial. Many sugary food additives, agricultural chemicals, and chemicals designed for other uses, fall into this category.⁸

Reasons for and against hope in the core and public purpose economies

There was a time when labor unions were seen as the “countervailing force” that could hold up the social good against corporations. The size and power of unions has dwindled throughout the world, to where they no longer seem capable of providing an adequate balance. The obvious alternative is governments. It is often difficult, especially today in the United States, to be optimistic about this. The perversity of U.S. government priorities can be seen in the fact that, as U.S. infrastructure continues to deteriorate, and unemployment continues to plague the very workers needed to bring it back to a reasonable state of repair, public investment in infrastructure is flagging. As a share of GDP, U.S. public expenditures on infrastructure had a brief spike due to investment funded by the American Recovery and Reinvestment Act of 2009. Since then, however, infrastructure investment has fallen to its lowest levels since peaking in the late 1970s. At the same time – another example of perversity – fossil-fuel subsidies by governments around the world total about \$500 billion per year, while subsidies for renewable energy are significantly less – about \$120 billion.

In spite of huge vested interests in the economy that have brought humanity to the brink of ecological and social disaster, and that continue to motivate such distortionary policies as just mentioned, the energy transition is gathering steam. The capture of governments by private business is not yet complete, and must be reversed if the necessary changes toward more sustainable production and consumption are to take place. Because so much of the capital stock and infrastructure of modern economic systems are based on fossil-fuel energy use, a speedy transition from fossil fuel dependence will require massive restructuring and new investment. While private businesses are already playing a role in this process, as the price of sustainable energy sources drops relative to fossil fuels, at the same time appropriate government policies will also be essential to foster the transition.

A look at history provides some useful comparisons. In the early fossil fuel age government policies were necessary to motivate and organize the massive infrastructure changes required to move to a new energy system. Pipelines were laid and roads for automobiles were

⁸ According to *Drawdown*, edited by Paul Hawkin, the replacement of atmosphere-harming refrigerants with available alternatives is the most important single step that can be taken to reverse our march towards a dangerously warmed climate. However until recently the chemical lobby in the U.S has stopped the EPA from approving natural refrigerants for sale.

constructed, with gas stations at convenient intervals. A massive electrical grid was built. Private investments played some important roles, but they would have been too risky without government standards setting – for example, deciding what kind of electrical current would be the norm, so that the manufacturers of lamps, fans, and other appliances could know that their products could be plugged in anywhere.

Similarly, today there are critical roles for government, well beyond the re-allocation of subsidies. Because of the increasingly short time-horizon of private business investment, governments will also often have to take the lead the way on innovation (see Mazzucato) to come up with critical solutions. More prosaically, utility companies must be restructured so that they can deal with receiving energy from a wide array of producers, some as small as rooftop solar from a single home. Electric transmission systems need to be upgraded or built to accommodate new power plants including wind and solar farms, and to reduce losses in transmission. Smart grid technologies are needed to manage electricity supply, demand, and usage in real time.

Just as early 20th century governments needed to set standards for a variety of aspects of the new age of electricity, they now need to help in defining, for example, what can be considered a renewable energy source. Powerful interests have urged governments to mandate the use of corn ethanol as a “renewable” source of energy. So it is, in principle, but the energy required to produce corn ethanol is about equal to the energy obtained, while the expanded acreage put under corn monocrops draws down on the resource of soil fertility and competes with other uses for that land. Other profit-driven interests, in Europe even more than in the US, have lobbied to have the burning of wood pellets and other forest products labeled “carbon neutral,” because over time trees can be regrown. However, electricity produced by burning wood releases 50% more carbon dioxide than coal, and there is no assurance that forests will be regrown. Environmentally-oriented economists stress the importance of “getting the prices right” as a way to internalize negative externalities: It is equally important to get the regulations and the definitions right.

If the federal government, at least in the United States, seems to have lost much of the battle to uphold the public good against corporate interests, we can see pockets of resistance in some lower level, especially municipal, governments, where, sometimes with the help of the non-profits such as CELDF (Community Environmental Legal Defense Fund), ordinances are being written prohibiting fracking, injection wells, factory farms, pipelines, GMOs, water extraction, and dumping of toxic wastes (dumping is a surprisingly profitable business⁹); while towns are making their own plans to reduce pollution and the release of greenhouse gasses.

At the same time, there are broad social movements which provide some reasons for hope – movements that, in the “three economy” terminology may be seen as a rising up of the core economy to take a much larger than usual place on the public stage. Examples include recent protests by women and their allies against sexual and related power abuses. These core sector activities are increasingly hard to distinguish from the not-for-profit world, which continues to fight back against corporate power, especially where it attacks society’s ability or willingness to resist such looming dangers as climate change. Other non-profits protest health-harming products such as over-sweetened beverages and a wide variety of chemicals, as well as methods of production that are harmful to human and ecological health. To give just a few examples:

⁹ This is part of the externality economy, mentioned in footnote 1.

- Corporate Accountability began by instigating consumer boycotts against Nestle's aggressive promotion of breast-milk substitutes in developing countries, which was causing infant malnutrition and deaths, and has gone on to campaign against the privatization of water, among a number of other corporate encroachments on human well being.
- Ceres had its start in developing the Valdez principles, after the Exxon Valdez oil spill, and continues to work with investors to motivate companies to sign on to good environmental standards.
- The Center for Responsive Politics reports on lobbying activities by industries, with the top spenders being pharmaceuticals and health products, followed by the insurance industry, electronics manufacturing and equipment, and oil and gas.
- A newer, smaller organization, Mothers Out Front, has mobilized parents and others who care about the future to locate methane leaks (there are over 3,500 in greater Boston), and to hold the relevant companies accountable for stopping them.

Many more examples could be cited, around the world as well as in the United States (which is among the countries with the highest concentration of non-profit organizations). Nevertheless, clearly throughout most of the world money and power are strongly tilted towards people and corporations that have been enriched by the private business economy. What, then, can we hope to do against the excessive dominance of the values of private business mentality, and the spread of that model of behavior?

The value question is the most fundamental; that means we need to think about culture – how it is shaped, and where. I have suggested that the essential locus for this is the core economy; however, insofar as most schooling is still controlled by the public purpose economy, formal education is a critical component. One aspect of education, to which I have devoted twenty-five years of work, is the matter of what is taught to the large proportion of college students who take one or two economics courses (substantially larger than the number who go on to major in the subject). Educational materials created at the Global Development And Environment Institute at Tufts University¹⁰ seek to give students a more realistic understanding of how the private business economy actually operates, and how it interacts with the other two economies. In addition to the need for better – more realistic, less ideological – education in economics, there is a wide variety of other areas where values are learned. Just to mention one, good materials have been written about the need for educating young children about the blandishments of the market, to help them to critically evaluate messages that overtly or subtly say that happiness is to be achieved through purchases.

In addition to coming at these issues through cultural and value change, structural change is also needed. The most obvious problem here is the political structure that allows those in possession of large concentrations of money to use it to influence who gets elected to government positions, and what policies are put in place by those in office. The Citizens United judgement in the United States is the most clearly pernicious part of this malformed structure, but there are many other features, such as the revolving door through which government officials can look forward to becoming highly paid lobbyists, or the features of the electoral system that make it so expensive to run for office.

¹⁰ *Environmental and Natural Resource Economics, Microeconomics in Context, Macroeconomics in Context*, and *Principles of Economics in Context* are textbooks published, in the most recent editions, by Routledge Press. Additional educational materials for students of economics, or those in related fields who seek an economic perspective, are to be found on the website <http://ase.tufts.edu/gdae/>.

The need for change in the private business economy

History suggests a variety of paths that the private business economy might have taken to find a more benign place in its social environment. Cooperatives, unions, and even a more-or-less observed code of *noblesse oblige* among the owners of capital, have offered alternatives or push-back to corporate management pursuing short-term profit regardless of the cost to society. There have been times when businesses and the rest of society have had some awareness of a compact in which firms are allowed to make profits so long as they actually produce for the public good. Long ago this was formalized in terms of charters, originally given to companies by royalty, then conferred by states in the U.S.. Corporations are still required to have a charter to operate, but it has been a long time since anyone took this seriously, or proposed revoking charters for businesses that do more harm than good. A small “rechartering” movement has emerged from time to time, suggesting that all corporations should have a periodic (perhaps every 5 or 10 years) review of whether their charter should be renewed – or not. A model for such a review might be found in the periodic recertification required for colleges and universities.

Imagining movement toward basic structural change, we can recognize a variety of alternatives to the current corporate model, which is dedicated to profit as the single goal. Such imagining would see cooperatives as a growing option, along with other forms that are designed, from the start, to recognize externalities and to serve public well-being, while also earning enough income to survive. Paven Sukhdev, in his book *Corporation 2020*, cites as examples the Tata Corporation in India, Banco Santander in Brazil, and the early Ford Motor Company in the U.S. A number of non-profits are coming from the other direction towards such a possibility, as they find ways to support their essential mission through earned income, while keeping income-generation secondary to the mission. (Not all have succeeded in maintaining these priorities.) Given the existing pressures on corporations to respond to their shareholders’ desire for profits, Sukhdev emphasizes the need for governments to promulgate new rules, which “could be in the form of regulations on disclosing externalities, new taxation structures, revised standards on advertising practices, laws to register new corporate forms such as B corps, and checks on lobbying, to name a few” (p. 203).

No single corporation has the major responsibility for the global bioload of toxic wastes or the changing climate; they come out of the whole system. How can each company be persuaded to pay its share? An important legal case is being tried in Germany, regarding a Peruvian farmer’s claims against the German energy (mainly coal) giant RWE, regarding climate change damage in the Andes.

“[Farmer Saul Luciano Lliuya] argues that RWE, as one of the world’s top emitters of climate-altering carbon dioxide, must share in the cost of protecting his hometown Huaraz from a swollen glacier lake at risk of overflowing from melting snow and ice. RWE’s power plants emitted carbon dioxide that contributed to global warming, increasing local temperatures in the Andes and putting property at risk from flooding or landslides, Lliuya argues.”¹¹

The case rests on evidence that RWE is responsible for 5% of the climate-affecting gases in the atmosphere; therefore it should pay 5% (approximately \$20,000) of the cost of shoring up

¹¹ Reported in *The Guardian* from Agence France-Presse, Thu 30 Nov 2017.

the dam to protect the town now at risk. A somewhat similar case is being proposed in Massachusetts, where a town asks ExxonMobil to pay for the cost of protection against the harm that will ensue if rising sea level damages the plant that the company installed there several decades ago.

Conclusion – a possible future

The need for reform is huge – seemingly overwhelming. Yet the motives for reform are springing up all over the place. Maybe this is a moment to be a Pollyanna, rather than a Cassandra: Yes, we face disasters on every front – political, environmental, social – but, as was long ago remarked, nothing so concentrates the mind as the prospect of hanging. The public purpose economy is staggering under the need for reform in education and politics, while the core economy is suffering from the lack of decent, secure jobs in a market economy whose inequalities belittle all but the very few who can think of themselves as the winners. No one believed Cassandra, but today there are many who know we face multiple disasters; probably most readers of this article are already suffering from *Pre Traumatic Stress Disorder*.¹²

Well, you're not alone; there's a gathering tide of despair morphing into activism. The time may have come to be, if not exactly cheerful, at least grimly determined, knowing that you are in good company. If we, individually and together – economists, as well as parents, women in general, and all people who care about the future – recognize the deformation of the private business economy as a central piece of dangers facing us, we will be better able to know where to direct our actions.

And, of course, if the three human economies can't reorganize themselves to respect limits, then the outcome will be decided by the economy of nature. One way or another – by design or by disaster – there will be dramatic shifts in the coming decades in the relationship between the human economies – especially that of private business – and the natural world. Changes in patterns of production, consumption, and the use of energy and natural resources will either be adopted by plan or be forced upon us. It is also to be hoped that these shifts will entail some potential for changing the allocation of what society produces – “who gets what.” If this opportunity to move toward a less unequal distribution is wasted, the life-style changes that are necessitated because there is less available to consume will largely be in terms of reduced well-being among the poorest members of society.

Millions of participants in the creation of all the human economies – from international organizations to households, from national to municipal governments – are seeking the roles and outcomes that suit them or that they believe in. During the period of enormous transition that we face, sizeable segments of the U.S. workforce are in a state of anxiety or despair over job uncertainty or unavailability, and the country's democratic traditions are under severe stress from the capture of government by private business. All of this is the backdrop to responses that will be required to meet the costs of climate change that we are not managing to avert. Rising prices of energy and materials, but not of human labor, are likely to mean a continuing trend toward more service-sector work. To me as an economist, all of this spells lower wages, which means less purchasing power for workers. Some people believe that

¹² This term seems to have been coined simultaneously by Carolyn Raffensburger and Thomas Homer-Dixon.

smarter technologies will keep the relation between production and wages at least stable, but it is clear that there are environmental reasons why the high-consumption lifestyle of the United States is unsustainable anyway. For this country all indications seem to point in the same direction: to a future with less stuff per household. If this is inevitable, we might as well make the best of it: reducing our consumption – by choice or necessity – as we reduce work hours and take-home pay, while increasing leisure and well-being.

Let us, then, imagine ourselves at a time where the major elements of the transition to a post-carbon economy have taken place, along with significant institutional experimentation and reform, and we have settled into a less turbulent period. What might it be like?

If corporations have not managed to redesign themselves to be oriented toward the promotion of human well-being, then the corporate form will have been replaced with other modes of production: co-operatives, local trusts, various not-for-profit organizations, and perhaps other forms not yet discovered. A strong revulsion over the degenerate form of a now decaying civilization could result in the creation of clean governments that have not been captured by corporate interests but are devoted to the good of the people. A renewed and reinvigorated public purpose sector could seriously address inequality and global as well as local poverty.

The throw-away society that developed in the twentieth century has externalized huge costs onto the environment and the people of the future. Long into the future humanity will still be picking up these costs; less figuratively, they will probably still be picking up our trash. They will not be using plastics because these end up in the oceans, where they are ground into non-biodegradable fragments; they will be using wood sparingly in order to allow forests to regenerate; and will replace most chemical fertilizer with intelligent farming systems that rebuild the soil. All of these choices will come with a sizeable shift in prices, with some important materials relatively more expensive than now. The era of expensive energy may, in the most optimistic scenario, give way to one in which solar and other clean sources have become easily abundant, and cheap; but the lessons of frugality and of how to live a better life with less work, less income, and less stuff will have been learned.

The great realization, which could in the present time become a groundswell of hope and cooperative activity, is that, badly as we humans have treated the planet, all is not lost. Efforts at ecological restoration working effectively here and there – in forests in Brazil and Finland, in farms in the U.S. and South Africa, in botanical gardens and parks in Hong Kong and Canada – are showing that nature responds positively to intelligent efforts at restoring ecological quality. Many such efforts include in their positive effects the ability to store atmospheric carbon in soils, plants and water – providing a significant boost for efforts to keep the warming of the planet within less-than-cataclysmic bounds. Ecological repair activities are sometimes based, at whatever remove, on modern science, and sometimes on older knowledge, often that held by indigenous peoples. There is a growing move towards global expansion and sharing of all knowledge about what works to rebuild the health of soils, waters, forests, and even the ecosystems coincident with cities. Not all that has been lost can be regained, but almost everywhere it is possible to recover some degree of ecosystem functionality and resilience.

This is a hope for the future that will necessarily engage all three economies working together. Governments will need to create supportive regulatory environments. As it becomes increasingly clear how much money can be saved, and earned, by restoring the natural capital on which humans and other species depend, actors in the private business as well as

the public purpose economies will be motivated to invest in ecological repair. As the evidence grows for the strong positive linkages between human health and well-being on the one hand, and healthy ecosystems on the other, individuals, families and communities in the core sector will take pleasure in participating in local restoration activities.

As new and rediscovered knowledge makes ecological remediation, regeneration and restoration increasingly possible, such work is arising as the most positive opportunity for reversing some of the negative trends of the modern era. It seems not unreasonable to hope that, as all of the human economies move together to work on recovering the balance of human and natural economies, the three human economies will also find opportunities and means to redress the balance among them, reducing the now-overwhelming pull of the profit motive, and better aligning them all toward human well-being and ecological health.

Related readings

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The public economy: understanding government as a producer. A reformation of public economics

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Abstract

In mainstream economics scripting, government is either bumbler or villain. Cast as market fixer, intervenor, enforcer or redistributor, the state cannot but act inefficiently or, worse, illegitimately. Public goods and collective action are called “problems,” the commons a “tragedy.” Even today’s so-called “public economics,” as represented by the “public choice” school, is decidedly anti-public. It was not always thus. More than a century ago, economists theorized the state as a framework of collective agency for public purpose and understood government as a producer meeting collective needs. A cogent concept of “the public economy” guided this nascent field of public economics, long since lost to historic upheavals and repression by proponents of market-centric rational choice theory.

This paper rejects today’s orthodoxy and its artful, but artificial, construct that subverts the ability of the public economic system to produce on behalf of the polity. I call instead for the embrace of a new public economics that returns to lost roots while breaking new ground by taking into account the biophysical imperatives of production. The model offered here takes a systems perspective (as did Quesnay and early 18th-century Physiocrats); recognizes a public economy with distinctive purpose and drivers (as did the “German Public Economics” theorist Gerhard Colm in the 1920’s); and focuses on government as a producer (as did Paul Studenski in the 1930s-50s). Finally, it draws on two centuries of physics and on 21st century systems ecology in recognizing biophysical imperatives inherent to production. Developing and promoting a cogent theory of the public economy system is vital to the effective operation and, ultimately, the survival of the governmental systems by which democratic nation-states function today. The simplistic type-casting of government, the “market-failure” rationalization for state action, the invalid imposition of market axioms and assumptions on the public domain, the disregard of public purpose must all be rejected. It is time for a Reformation of public economics.

1. Mainstream economics and the state

In standard economics scripting, government is most often cast in the role of bumbler or villain. Whether as market fixer, intervenor, enforcer or redistributor, its actions are portrayed as resulting in “distortion,” “inefficiency,” “deadweight loss,” and worse.

Three quarters of a century ago, Paul Studenski rejected such casting. He found government to be a vital figure whose role was not simply to intervene or redistribute. Government was a *producer*. A professor of economics at New York University (1927-55), an authority on public finance, and a widely-respected historian of national income accounting,¹³ Studenski argued that “government is a productive, wealth-creating organization. It supplies direct utilities as well as aids to private production” (1939, p. 34). He elaborated:

“Under all forms of organized society, economic activity has required some collective effort in addition to the individual one, and this is still true of the

¹³ In *The Income of Nations* (1958), Studenski traced the history of national income accounting and competing historical conceptions of production. Descriptions of Studenski’s work can be found in Warren 2005 and Ogle 2000.

modern society. The notion that production for exchange is alone 'productive' is preposterous.

Production consists in the creation of utilities. Government furnishes services and goods which satisfy the two tests of economic value—namely, utility and scarcity. They satisfy human needs and must be economically used. **Government is, therefore, engaged in production just as much as is private enterprise.** Government employees are just as much producers as are private employees and entrepreneurs. To deny this fact is to demonstrate one's faulty economic education or the fact that one's idolatry for business has thwarted one's vision" (emphasis added).

His language and logic challenged mainstream economic thought, which by his era had turned to "exchange" theory and had sidelined "production". However, production *had* been of central interest to 18th century and subsequent generations of economists, who were concerned with the processes by which value was created. But, even then, government had persistently been placed outside the "production boundary" (Mazzucato, 2018) and the state was, at most, assigned only a supporting role. Even Karl Marx, who wrote of the "hidden abode of production" in the first volume of *Capital* (Böhm & Land, 2012) did not address the state's role as producer. And once Marx adumbrated a "labor theory of value" that could be used effectively to reveal the exploitation of workers by employers, liberal economists began to downplay the significance of production itself. In reaction to Marx, mainstream economists moved "to recast economics as a science of exchange rather than production" (Perelman 2006). This transformation facilitated mathematical modeling in economics and the eventual construction of a quantitatively precise but pragmatically constricting "production function."

In short, by the time that Studenski was writing, not only was government viewed as not productive, there was essentially no basis for even considering government as a producer, since economics had made "exchange" ¹⁴ between sellers and buyers the embodiment of economic value.

But Studenski's stance would not have been out of line with the thinking in the "German Public Economics" school that had flourished in the late 19th and early 20th centuries. Economists in Germany (and other European countries) had concerned themselves with "[u]nderstanding the economic foundations and explaining the scope of the state" (Sturn, 2010). Some saw the state as "a framework of collective agency for common purposes," and understood government as a producer – the "mechanism" for producing the goods and services necessary to meet "collective needs." However, with the rise of Nazism and the emigration of many of these theorists, a flourishing school of public economics fractured and the very idea of a "public economy" was eventually expunged from mainstream economics.

¹⁴ Concerning the diminished role of production in neoclassical theory see: Bernstein, 2001, p. 95; Haring and Douglas, 2012; Stretton and Orchard, 1994, p. 158. Hudson (2012) writes: "Today's supply and demand approach treats the economy as a 'market' in a crudely abstract way, as quantities of goods (already produced), labor...and capital...are swapped and bartered with each other." Ogle traced the history of production in his 2000 thesis. He writes: "According to Walras, 'The theory of exchange based on the proportionality of prices to intensities of the last wants satisfied ... constitutes the very foundation of the whole edifice of economics.'" ... "Neoclassical economics thus posited a definition of production based on the preferences of (autonomous, rational, utility maximising) individuals expressed through the market."

This paper calls for recognition of the public economy, argues for a reformed public economics, and proposes the elements of a new conceptual model.

This section describes and challenges the role-casting of mainstream economics, and very briefly reviews the history of the emergence and then submergence of the concept of a “public economy.” Section 2 outlines the impacts on the polity and the planet that have resulted, at least in part, from submerging the public economy in economic theory and concurrently imposing market axioms and assumptions on the public sphere. In Section 3 I revive the idea, also buried by modern mainstream theory, that there are multiple economies, not simply a market economy. Section 4 introduces the elements of a new theory of the public economy which both returns to the 18th-century roots of economics and also breaks new ground. The new public economics concept offered here has the following features: (1) it takes a systems perspective (as did Quesnay and the early 18th century Physiocrats); (2) it recognizes a public economic system with distinctive purpose and drivers (as did Gerhard Colm, a leader in late 19th century “German public economics”); and (3) it focuses on government as a producer (following Studenski). Also, (4), it incorporates biophysical imperatives and constraints inherent to production and consumption, which draws on the insights of the Physiocrats and the learnings of 21st-century biophysical and ecological economics. Section 5 discusses the extraordinary complexity and difficulty of measuring results in the public non-market system, calling attention to the suffocating and destructive imposition of market-model public sector performance measurement schemes throughout many governments. This section summarizes what it will take to move away from “metrics mania” and toward a useful method for gauging the results of public production. The last section suggests a research agenda that can build both on restored historical thinking and on emerging knowledge about the biophysical realities of production.

The unrecognized public economy and devalued government production

While government as a producer goes unrecognized in today’s conventional economics textbooks, throughout the real world of modern nation-states, public non-market production constitutes a major share of economic activity. Yet, the means by which this production occurs is not understood, explained or even recognized in mainstream economics teaching, dwelling, as it does, on the “market” model.

This vacuum of understanding is not of mere theoretical interest. In the absence of any understanding of the government as a producer, anti-state ideologues and opinion leaders have been able to impose market axioms, principles and practices on the public sector. The results are dire: private enrichment at public expense; perversion of public purpose; devastation of public goods; destruction of the means of producing them.

The citizenry has been given the impression that the private sector – the market – is the source of most goods and services. In the United States, we frequently hear that private consumption makes up two-thirds of the economy. This misleading statistic contributes to the impression that, at best, government is irrelevant to the production of things people need and want and – more perversely – that government gets in the way of efficient private sector provision.

Yet, government's contribution to economic activity is sweeping and crucial, and arguably larger than portrayed by GDP calculations¹⁵ or the impressions conveyed to the public. Among European Union countries, government expenditures average 47% of GDP. And in nine European countries, government expenditures equal *half or more* of GDP.¹⁶ Government's share of GDP output,¹⁷ a different calculation that omits "transfer payments," shows government's share ranging from 12% to 26%. In seven European countries, government's share of GDP output is about one-quarter,¹⁸ even according to the faulty methodology of GDP accounting, which undervalues government's contribution. From either standpoint – expenditures or output – government's share of economic activity is significant.

As Lew Daly noted in "What Is Our Public GDP? Government in the Twenty-First Century Economy," (2014) there is a "problem of *unmeasured public value* in our economy." Further, "As a result, a significant portion (exponentially significant, by some estimates) of valuable output, particularly in the form of non-market capital development, is obscured by or excluded from our measured growth and, more to the point, from the measurable landscape of public policy."

The undervaluation of government output in GDP has been documented at length. Papers have been written and committees formed to address the need to find a legitimate way to value government output and measure the rate of return on public investment (see, e.g., Slater and David 1998). In their paper, "A Framework for Nonmarket Accounting," Abraham and Mackie (2006) reported on the findings of a National Academy of Sciences panel that recommended the creation of "satellite accounts" within the system of national accounts to improve the system for valuing government and household production. Despite numerous efforts, no reformation has taken root.¹⁹

The conventions of national accounting systems which spawn GDP pronouncements about the relative importance of the private and public sectors in national economies flow out of mainstream economics.

Mainstream economics: A world of public problems and tragedy

Mainstream economics associates public or collective action with a host of discouraging "problems":

- **the public goods "problem"**

In the market-centric world of mainstream economics, public goods today are pronounced "a problem" because, being "non-rivalrous" and "non-excludable," they are not amenable to

¹⁵ Inadequacies of GDP calculations relating to government are discussed later in this paper.

¹⁶ Belgium 53.9%; Denmark 54.8%; Greece 55.4%; France 57%; Italy 50.3%; Hungary 50%; Austria 51.6%; Finland 57%; Sweden 50.2%.

http://ec.europa.eu/eurostat/statistics-explained/images/7/70/Total_general_government_expenditure_by_function%2C_2015_%28%25_of_GDP%29_03032017.png

¹⁷ There are two principal conventional ways in which government's contributions are portrayed in GDP calculations: expenditures and output.

¹⁸ Government's share of total output for 2016 was at or nearly 25% in 7 countries: Sweden 26.1%; Denmark 25.4%; Finland 24%; Netherlands 24.7%; Norway 24.3%; France 23.6%, Belgium 23.6%

<https://data.worldbank.org/indicator/NE.CON.GOV.T.ZS>

¹⁹ The Bureau of Economic Analysis recognizes and acknowledges some of the deficiencies, but concludes that the research "is currently preliminary, and further research is needed before [the recommended] measures can be considered for implementation in the national accounts. (Bureau of Economic Analysis 2017, pp. 9-4).

market production. This contemporary textbook portrayal of public goods arose out of work in the mid-20th century, particularly that of Richard Musgrave who was striving to explain the legitimate role of the state in providing goods and services (Tremblay, 2017)²⁰. The concept was adopted and adapted by Paul Samuelson who mathematicized it. Subsequently, public goods became a “problem”. As Sonja Amadae (2004) puts it, “the public goods problem” is an “invention” of rational choice theorists arm-wrestling with the “dilemma” of cooperation.

- **the collective action “problem”**

The “collective action problem” insists that, absent coercion, people will fail to work toward or contribute to a common goal that would benefit all. Advanced by Mancur Olson in the 1960’s, this axiom is used by public choice adherents to argue against government provision and in favor of market provision. Stretton and Orchard (1994) capture some of the features and flaws of collective action theory: “A common theme is that the provision of public goods allows so much freeloading and self-interested contrivance by powerful groups and individuals that societies do well to make do with as few taxes and public goods as possible...The curious argument of *The Logic of Collective Action* [Olson’s major work] is this: because freeloaders can gain more from collective action than the collective actors can, collective action is never rational.”

- **the “tragedy” of the commons**

The “tragedy of the commons” probably owes its staying power more to clever naming than to its supposed insight that, since people act in their own self-interest, they will not voluntarily collaborate to preserve a “commons.” Elinor Ostrom refuted the tragic assumptions with examples from real-life experience around the world. As Amadae observed (“Bargaining With the Devil” 2004), Ostrom’s famous refutation may be just pointing out the obvious –

“in their great and ongoing experiments with social coordination, humans themselves often resolved the “tragedy of the commons” problem long before it attracted the attention of social theorists. The role of social scientists was not that of teaching people how to solve this paralyzing dilemma. Instead, social scientists articulated a form of knowledge that human social actors had realized at a subliminal level but were not able to articulate in language or theory. I think this raises an important question of who is learning from whom: Does the social scientist draw new insights into age-old human dilemmas, or is the social scientist at times one step behind the wisdom of common human experience? This example calls for humility on the part of social theorists who, it may turn out, are ‘conceptualizing subjects’ decision tasks’ in new ways, but are not necessarily providing new strategies for solving basic human dilemmas.”

- **the zero price “problem”**

In mainstream economics, price is the determinant of value. Therefore if goods and services are supplied without a price – i.e., they are “free” at the point of receipt or usage – they cannot be valued, or calculating their value is difficult, i.e., a “problem”. This is, of course, one of the

²⁰ In addition Keynes had talked about “public works” (Roy Harrod, *The Life of John Maynard Keynes*, 1951) and, earlier, public goods had been discussed by German public finance theorists, e.g., Margit Cassel (Richard Sturm, “Public goods’ before Samuelson: interwar *Finanzwissenschaft* and Musgrave’s synthesis,” *The European Journal of the History of Economic Thought*, Vol. 17 Issue 2, 2010).

difficulties intrinsic to traditional calculations of government contribution to GDP: public economy outputs cannot be accurately valued because they are not sold.

- **the “problem” of taxes**

Economics textbooks devote chapters to the topic of taxation, detailing how taxes take money *out* of “the economy.” But rather than try to sum the teachings of texts on taxes, it is perhaps more illustrative to cite this quotation from a recent article on bitcoin by Holden and Malani (2018) in which mainstream dogma on taxation is presented as though a law of physics:

“The basic economics of taxation tells us that the economic losses from taxes increase exponentially with the tax rate, so [raising taxes] would transform revenue losses into a lower gross domestic product.”

- **the public as meaningless**

In writing about the impacts of rational choice economics, Amadae (2003) discusses the ways in which “rational choice liberalism” cast doubt on the “meaningfulness of ‘the public,’ ‘public interest’ or ‘general welfare’.” This skepticism grows out of the doubt that procedures of collective decisionmaking can achieve rational outcomes, even in the best of circumstances.”

- **Arrow’s Impossibility Theorem**

Economist Kenneth Arrow produced a mathematical formulation that seemed to prove that democracy cannot “work.” His “impossibility theorem” and related formulations have been interpreted as being “destructive of the possibility of reasoned and democratic social choice.” (Sen, 1999). According to Buchanan (2003, pp. 1-4), Arrow’s theory indicated that imposing majority will on the outvoted minority would inevitably lead to outcomes that are “inefficient and unjust.”

- **deadweight loss**

As an “intervention” in the economy, state action must always be circumscribed, lest the apparatus of the market be “distorted.” Market distortions in turn result in inefficiencies or worse. As the “Free Exchange” columnist in *The Economist* (2007) notes, in “the standard curriculum... government interventions in the market always generate a ‘deadweight loss’”.

Such apparently formidable “problems,” taught in most university courses on economics, prejudice students against government, which then translates into a professoriate and a professional class bereft of the tools that could help them appreciate public economy activity and accomplish the work that many of them would like to do on behalf of the citizenry. It also leaves them naked of intellectual and rhetorical armor to defend against attacks on the public non-market system by the market orthodoxy.

In the United States, about 40% of college students take at least one economics course (Goodwin 2014a, p. 101); after graduation more than half of economics majors go to work in government (Kalambokidis, 2014). Thus are government agencies in the US populated by economists taught to distrust government and to look to the market for best practices. As Stretton and Orchard (1994, p. 138) remind us, “Such stuff educates rising numbers of the people we employ to govern us, and tells us not to hope or try to improve their quality. Insistently, explicitly, it tells *them* not to try to improve, except as ‘legitimate thieves’: to be anything else is irrational.”

Students themselves are rising up in protest. In the UK, the “econocracy” movement has been particularly vocal. In their book, *The Econocracy: The perils of leaving economics to the experts*, (Earle et al. 2017, p. 37), they write: “students are being sold short...[Universities] are failing to equip the next generation of economic experts with the knowledge and skills to build healthy, resilient societies.”

A missing “public economy” and a perturbing public economics

A concept of “the public economy” is as hidden as the abode of production in works of modern economics. With few exceptions,²¹ economics is blind to all systems but the market. The discipline does recognize “the state” and admits a subdiscipline called “public economics,” dominated by a school of thought called “public choice,” but it seems incapable of understanding government as an agent of production and a producer of economic value.

Historically, things were different. Economists and other social scientists saw government as a productive agent, and even considered the working “mechanisms” of “the public economy.”

- In 1856 Calvin Colton, Professor of Public Economy at Trinity College, devoted an entire book to *Public Economy for the United States*. Colton preferred “public economy” to the contemporary term, “political economy,” explaining his choice in terminology in detail, but his volume was dedicated to an analysis of “free trade” versus protectionism, not the workings of the public economy as such.
- In 1891 William Folwell of the University of Minnesota argued in “A Syllabus of the Public Economy” that the “Public economy should be recognized as a distinct...science, running parallel with that of private or social economics...We must demand the recognition of State or public economy as an independent body of phenomena, capable of being collected and grouped along a line of filiation...No sound conclusions can be drawn by mere deduction from the postulates of private economics.”
- In *The Science of Finance* (1895), the German economist Gustav Cohn explored in depth the public economy, which he saw as a response to “The Wants of the People” and “the collective needs of any community” (p 13). He noted that “the public economy remains the central fact of national life” (p 58). Examining the issue of the “division of labor” between the state and private initiative, he questioned the claim of “the so-called encroachment of the state upon the private life of the society.” In contrast to today’s economics (and such postulates as Arrow’s Impossibility Theorem or Olson’s collective action “problem”), Cohn wrote of “the superior rationality of the state as compared with the private economy of the individual. In the life of the individual the motive to a development of his wants springs directly from the natural impulses...On the other hand, it is inherent in the nature of the state that its demands, taken as a whole, go through a clarifying process... [P]eace, order, security, culture, relief – these are the higher needs which are mainly served by the public economy.” (p 73)
- In the late 19th and early 20th centuries a “German Public Economics” flourished. According to Richard Sturn (2010) this was more a “discipline” than a school, but while it “neither had a common theoretical foundation nor convergent political visions, it did not lack a common focal point: understanding the rationale for the modern state in a market

²¹ A major exception among textbooks is Goodwin et al., 2014, *Principles of Economics in Context*.

economy and enhancing its effectiveness.” Two of the prominent theorists within this group were Gerard Colm and Richard Musgrave, who both emigrated to the United States with the rise of Nazism. They represented different streams of the discipline, however. Colm’s approach was the more radical; it was premised on the idea that the public sector is an economic system with “its own economic logic – it is an essentially non-market type of economic system... [H]is starting points are not some pre-institutional individual preferences, scarcities and technologies, but state and market as [different but] complementary systems”. Musgrave, on the other hand, strove for synthesis with market theory. His approach interwove traditional and then-emerging trends in economics; he intertwined marginal utility theory, market failure theory and the more traditionalist roots of German public economics. In Sturn’s view, there was too large a “conceptual gap between Anglo-Saxon Public Economics and Gerhard Colm’s version.” While Colm entered public service after settling in the United States and had a “meteoric rise” in Roosevelt’s New Deal administration where his policy ideas had significant influence (Milberg 2017), his theory of the public economy lost out in the academic arena. “[C]ompetition between market and command economies [during the WWII era] created a demand for ‘scientific’ answers...” Colm’s approach “found little support in the post-war profession” of economics. Eventually it was Musgrave’s approach, not Colm’s, that was absorbed into mainstream economic theory.

- After moving to the United States in 1933, Musgrave, devoted his attention to public finance and the concept of public goods, building and elaborating on his conceptual synthesis. But, while he and Colm may have differed in their approaches, they both recognized the existence of a “public economy.” Maxime Desmarais-Tremblay (2013, 2017), a recent chronicler of Musgrave’s work, explains that Musgrave as early as his 1937 PhD thesis, “considers a national economy as a system that comprises two legitimate spheres – the market economy and the public economy – in an interrelationship, both drawing from the same pool of resources...Musgrave did not see the market as the baseline for all economic life and neither was it for the study of public finance.” Musgrave, according to Desmarais-Tremblay, understood the public economy as a socially-designed economic system to address collective needs, where: “the actual collective wants and socially interpreted individual wants satisfied by publicly provided goods depend on historical, political, and social factors” (Desmarais-Tremblay, 2017).
- Alan Peacock in the 1950s argued in his “The theory of the public economy” (Peacock and Wiseman 2010) that “Another mechanism [besides the market] has to be adopted in order to satisfy community wants...”

Peacock’s work was already something of an atavism, and soon after, the concept of a “public economy” was effectively extinguished, especially in the wake of Paul Samuelson’s reformulation of Musgravian “public goods” (Desmarais-Tremblay, 2013; 2017) as a mathematical expression of an increasingly limited case, and reliant, as it was and still is, on market failure theory .

Not only the ideas but the names of public economy scholars were relegated to disciplinary backwaters and lost to the mainstream of economics literature.

Indeed, economic thinking during the latter half of the 20th century underwent a remarkable transformation regarding the role of the state.

In his landmark book, *A Perilous Progress: Economists and Public Purpose in Twentieth-Century America*, Michael Bernstein tracks the evolution of economics from an academic field marginal to public policy into a powerhouse influencing and orienting government decision-making. Economists in the late 19th and early 20th centuries ardently sought to cultivate influence with elected and appointed officials to shape public policy and to contribute to “purposeful management” and “statecraft.” These were among the driving ambitions of those who led the American Economics Association after its founding in 1885. Seeking respect for the new “scientific” field (no longer framed philosophically as “political economy”), “scholars sought a privileged and powerful access to public policy debate, formulation and implementation.” If, as some asserted, it was not the business of economists to tell businessmen how to run their companies (p. 40), advising on the operation of government, was, somehow, economists’ business. And they got their big chance in World War II. Ironically, “Not individualism but rather statism provided the special circumstances” for American economists to obtain prestige and power (p. 89). “In point of fact, it was statism and centralized economic policy practice that had brought economists and their discipline to the prominence and influence they [came to] enjoy...” (p. 194) The irony does not escape him: “It is one of the great ironies of this history that a discipline renowned for its systematic portrayals of the benefits of unfettered, competitive markets would first demonstrate its unique operability in the completely regulated and controlled economy of total war” (p. 89).

After the War, and during the Cold War, as Sonja Amadae has shown (2003, p. 3), rational choice theory began its march toward ascendancy. Holding as it did that “rational individuals do not cooperate to achieve common goals unless coerced,” rational choice economics had “profound implications for democratic theory,” for its “axiomatic treatment of human rationality...could be used as a virtual litmus test to determine if one were a liberal individualist or an irrational collectivist.”

Economic historian Roger Backhouse (2005) has traced in detail the “profound changes in economic theory” that took place between 1970 and 2000 with the triumph of rational choice economics, which fostered a “remarkable and dramatic change in attitudes toward the role of the state in economic activity...a radical shift of worldview.” Along with the rise of “free market” economics, the “ideology of rational choice” led to a belief among economists that government action creates perverse outcomes, which in turn produced a “climate of opinion” within economics biased against government.²² This shift toward exclusively market solutions, as Backhouse notes “did not occur spontaneously: it was actively promoted by groups of economists committed to opposing socialism [and] making the case for free enterprise...”²³

While the concept of a “public economy” may have been squelched and the German Public Economics discipline fractured, we still have a “public economics.” And there are distinguished economists toiling in its fields (for example, Avner Offer of Oxford University

²² Roger E. Backhouse (2005), “The Rise of Free Market Economics: Economists and the Role of the State since 1970”, *Hist. Polit. Econ.* 37(Suppl 1), pp. 355-392.

²³ “The shift toward market solutions did not occur spontaneously; it was actively promoted by groups of economists committed to opposing socialism, making the case for free enterprise, and reviving the fortunes of liberalism. In the first stage, the most influential institution was, as the previous section has made clear, the RAND Corporation, which brought together the Cowles Commission, Princeton University, and many of the economists associated with the development of rational choice theory. RAND was a think tank set up by the U.S. Air Force at Santa Monica, California, to prevent the scientific and technical expertise that it had brought together during the Second World War from being dispersed. It was established in 1946 as a division of the Douglas Aircraft Company to undertake research on air warfare.” Roger E. Backhouse, “The Rise of Free Market Economics: Economists and the Role of the State since 1970”; (2005)

[Offer, 2012] and Massimo Florio of the University of Milan [Florio, 2013]), and an entire “Institute of Public Economics” at the University of Graz. In 1969 Margolis and Guitton put together a volume titled *Public Economics*, which represented the proceedings of a conference held by the International Economic Association concerning an “Analysis of the Public Sector.” Yet the contributions are consistently indentured to the market model. When Joseph Stiglitz produced a textbook on “the economics of the public sector” (the latest edition in 2000), his text did not recognize a “public economy,” or the distinctive characteristics of a public non-market system. Instead he relied on “market failure” to open the way for a role for government.

In general, the field of public economics remains constrained by the absence of a theory of the public economy that is unchained from the market model and its axioms. Major credit for this state of affairs no doubt belongs to the “public choice” school, to which I turn next.

Public Choice – The Reigning Public Economics

As a subfield of microeconomics, public choice moved obscurely through the economics literature of the Cold War (Backhouse 2001, 2005), then took flight during the 1970s to become the reigning “public economics”. James Buchanan, Gordon Tullock and Mancur Olsen were leading figures in the establishment of the field; their work also leaned on the “Impossibility Theorem” of Kenneth Arrow. More recently Tyler Cowan has been a leader in the public choice arena (MacLean, 2017).

Here is Backhouse (2005) on the school’s early development:

“The conventional view of policy ha[d] been to see the government as optimizing some social welfare function. The political process determined the values on which government policy had to be based, and the role of economists was to understand the constraints and design interventions, such as regulations, taxes, or government activities, that would achieve those objectives. Public choice theory challenged this by approaching government decision makers, whether politicians, civil servants, or regulators, as motivated by their own ends. This meant that government policy came to be seen not as maximizing social welfare but as driven by the interests of those responsible for implementing it. Government failure was as pervasive as market failure. The very possibility of government regulation would lead to rent seeking – using lobbying and other activities designed to achieve better treatment – diverting resources away from productive activities.

This critique of government, which suggested that inefficiency was inherent in any government-run activities, fits well with the earlier critiques of socialism offered by Friedrich Hayek (1935) and others in the 1920s and 1930s.

Public choice became a school, and a movement, when James Buchanan and his collaborators found a home for their efforts at George Mason University in Northern Virginia. In the mid-1980s George Mason inaugurated the Center for the Study of Market Processes, its largest supporter being the Koch Family Foundations” (Backhouse, 2005, p. 376).

In diametric contrast to German Public Economics theory of a century ago, the public choice school rejects the legitimacy of collective endeavor. It portrays the public sector as “an arena for innumerable individual exchanges” (Stretton & Orchard, 1994, p158). A central tenet of public choice theory is that “politicians and (especially) bureaucrats seek to enrich themselves by enlarging their budgets.” (Stretton and Orchard, 1994, p 151). And they seek little else, as Tyler Cowen et al. (1994) argued in a paper: “Public officials often have little incentive to spend time and effort proposing policies that benefit others.”

A chief aim of public choice protagonists has been to influence the operations of government and to curtail the authority and power of the state (MacLean, 2017; Stretton and Orchard 1994). During the Reagan administration they made their first major leap from academia into government. Reagan’s Commission on Privatization issued a report that cited as validation for its recommendations on contracting-out the “problems of the American governing process identified by the public choice school...” (Kettl, 1993, p. 63). And Reagan appointed E.S. Savas, known as the “father of privatization,” as Assistant Secretary of Housing and Urban Development (HUD). Although Savas in 1983 was forced to resign from his high position at HUD due to “abuse of office,” chiefly for having HUD staff type, edit and proofread his book, *Privatizing the Public Sector: How to Shrink the Government*, at least one reviewer gave the book high praise. Citing public choice theory as validation for Savas’ privatization thesis, the reviewer tells us that “Privatizing is the peaceful way of dismantling the State brick by brick” (Reed, 1983).

The tenets of the public choice school have become entrenched within some public administration circles, as an article on performance measurement in *Public Administration Review* demonstrates. Rabovsky (2014), describes the school of thought which holds “that public administrators can generally be conceived of as self-interested, budget-maximizing bureaucrats who are constantly working to exploit their informational advantages in order to avoid meaningful oversight”.

In a pamphlet he wrote about the origins of public choice theory, Buchanan (2003) described how his book, *The Calculus of Consent*, written with Gordon Tullock in 1962, laid the groundwork for a movement they initially called “Non-Market Decision Making.” They brought together a group, whose discussions were

“sufficiently stimulating to motivate the formation of a continuing organization, which we first called the **Committee on Non-Market Decision-Making**, and to initiate plans for a journal initially called *Papers on Non-Market Decision-Making*, which Tullock agreed to edit” (emphasis added).

But, as Buchanan explained,

“We were all unhappy with these awkward labels, but after several annual meetings there emerged the new name “public choice,” for both the organization and the journal. In this way the Public Choice Society and the journal *Public Choice* came into being. Both have proved to be quite successful as institutional embodiments of the research program, and sister organizations and journals have since been set up in Europe and Asia.”

Outside the world of economics, Buchanan for years remained fairly obscure, but became better known with the 2017 publication of Nancy MacLean’s *Democracy in Chains*, explicitly

intended for the general reading public. Among other revelations, MacLean has documented how Buchanan's work and the public choice view of government have been financed largely by the Koch brothers through their subsidies to the Economics Department at George Mason University where the public choice confraternity has been housed since 1983. The Koch Foundation alone has donated \$96 million (McDonald, 2017) to the Department and its affiliated Mercatus Center that promotes public choice theory and libertarian policies.

The case against public choice as both economic artifice and conservative agenda has been best made by Stretton and Orchard, who document the anti-government, anti-democratic stance of public choice theory. They suggest that public choice "reasoning seems to arise from the theorists' reluctance to 'come out' and identify themselves as open enemies of democracy or at least of universal suffrage."

Ignoring the important and expansive body of work from the 19th century German Public Economics discipline, Buchanan began a 1967 paper on the premise that economists had not paid attention to collective decision-making, particularly how individuals make choices through the political process.

"Individuals, separately and in groups, make decisions concerning the use of economic resources. They do so in at least two capacities: first, as purchasers (sellers) of goods and services in organized markets, and, secondly, as **'purchasers' ('sellers') of goods and services through organized political processes**. Economic theory has been developed largely to explain the workings of organized markets, and the trained economist understands how decentralized decisions are mutually co-ordinated so as to produce allocative results that are internally consistent. **Economists, especially English and American, have devoted little time and effort to an explanation of individual behavior in the second decision process. Individual participation in collective decision-making has not been thoroughly analyzed**, and the means through which the separate private choices are combined to produce 'social' or 'collective' outcomes have not been subject to careful and critical research... There exists no 'theory of collective choice,' no 'theory of demand for collective goods,' that is analogous to the familiar theorems and propositions in neoclassical economics. **We know little about how individuals behave as they participate in collective choice**. In societies that are organized democratically, even in the broadest sense of this highly ambiguous term, individuals must be assumed to participate in the formation of 'public' decisions" (emphases added).

Having raised the right questions,²⁴ Buchanan and his public choice school arrived at answers that don't squarely address them but do advance a right-angled political agenda. The questions he raised in 1967, had been addressed a century earlier in European public economics, but one does not learn that from studying "public choice" teachings. So today we must re-address these questions and construct a valid, penetrating and persuasive analysis of how the system of collective public action operates in modern economies.

²⁴ Interestingly, Mancur Olson's "Logic of Collective Action," addressed these questions and had come out in 1965, but there is no trace of Olson in this paper, even though Olson's thesis was earth-moving on these issues and became a bedrock of public choice theory.

In “Public Economics After Neoliberalism: A Theoretical-Historical Perspective,” Madra and Adaman (2010) shine a light on the spread of public choice economics well beyond Anglophone countries, then call for public economics as a discipline “to move beyond neoliberalism.”

Simply put, there are three basic problems with this school of economic thought: 1) it fails to recognize that the public economy is *non-market*; 2) it ignores scholarly work that has proven that many of the fundamental assumptions and assertions of market economics are as inapplicable to the everyday working of the market as they are to any non-market (e.g., Fullbrook, ed., 2007); 3) it ignores the body of work from German Public Economics – the “original” public economics.

2. The results

Mainstream economics’ perspective on the state – and not solely the perspective of the public choice school – has had enormous impact in the academy, in government and on the lives of citizens. Here are some of its characterizations of government with which we must now everywhere contend:

a. Government is non-productive.

Studenski (1939) brilliantly described and disputed the “theory of nonproductivity” of government, which formed “a fundamental tenet of the so-called classical and neoclassical schools of economics still dominant in this and many other countries...” One passage (pp 23-24) is worth quoting at length.

“Theory of Nonproductivity

Towards the end of the eighteenth century...under the influence of the industrial revolution, a sudden revulsion took place in the political and economic thinking of the time. The entrepreneurial class, in its quest for freedom from restrictive governmental regulation, attacked the ability of government to attend to the economic affairs of its citizens. Political economists took the view that business enterprise was the sole productive agency in society and that government was a passive, nonproductive, wealth-destroying organization...

Strange as it may seem, this peculiar doctrine of the nonproductivity of government activity has tended to persist to the present day, and forms a fundamental tenet of the so-called classical and neoclassical schools of economics still dominant in this and many other countries at the present time. The theory of the nonproductivity of government activity is founded on several basic errors, to wit: (1) a tendency to regard government as an organization independent and apart from the people and pursuing its own advantage; (2) a wrong identification of economic activity with individual endeavor to make a living, and a failure to recognize the importance of collective economic effort; and (3) an unduly narrow commercial view of production as the creation of utilities having an exchange value. The exponents of the nonproductivity theory of government activity fail to see that government in modern democratic society, with which we are particularly concerned, is an agency

set up by the people for their own advantage and controlled by them with a view thereto, and is, in fact, in some of its aspects, the people themselves acting collectively. Quite erroneously they conceive of government as being operated for the sole advantage of scheming politicians. It is wrong to conceive of economic effort as being purely individual in character.”

b. Collective public action has no legitimacy

The collective and cumulative impact of pro-market postulates such as “the collective action problem,” the “public goods problem,” and the many others listed above is a de-legitimization of the state – of government – as a vital and authentic, or even an acknowledged, economic actor. Government is most often cast as a villain in the operation of “the economy.” All evidence to the contrary – the scope and level of its productivity, the success of its investments in technological breakthroughs, the essential value of its foresight, planning, and maintenance of infrastructures (Lind 2012; Mazzucato 2013) – has been quite thoroughly covered up or spuriously repudiated (Hacker & Pierson 2016).

c. Government is incompetent.

The market-centrism of mainstream economics has played directly into political and popular media views of government as incompetent and inefficient. In *Public Goods, Public Enterprise, Public Choice*, Stretton and Orchard (1994) analyzed four beliefs that together constitute “a theory of public incompetence” (p. 80). All four derive from the axioms of neoclassical economics, in particular that self-interest is the universal motivator, and that markets, unlike governments, are invariably efficient, punishing failure by eliminating inefficient producers. Today, unfortunately, it is accepted as a truism that government is inefficient and unproductive, while the market is tirelessly productive and innovative. Even those who may not buy into such axioms, along with those who do, have decried “broken government” (see, for example Bruni, 2014; Luntz, 2014; Schuck, 2014; Teles, 2013).

d. The public domain should model itself on the market and use market solutions.

So entrenched is the creed of market superiority that government administrators are not only encouraged to work within a market model; they are often compelled to use “a market solution where markets had never existed” (Galbraith, 2008). Mainstream economic thinking has carried market-mimicry into ever-widening gyres of the public domain: rebranding public university students and public hospital patients alike as “customers”; seeking private sponsorships and trade advertisements for public parks, forests and preserves.

Beyond such “marketization” of government, we have seen widespread privatization and contracting out of public services (Sekera, 2016 & 2017), amounting to what Verkuil (2007) has termed the “outsourcing of sovereignty”. This routine commodification and profitization of government has led to its disfigurement, dismemberment and destruction.

e. State institutions should be reduced, restricted and replaced with private actors.

Toynbee and Walker (2017a, 2017b) have written convincingly and alarmingly about the “dismemberment” of the British state. Their summary applies to other democratic nations as well: “the idea of the state has been systematically disrespected, and derided as a concept to be regarded with suspicion,” and the cumulative effect of these negative sentiments is “a

sense of resignation that has allowed the functions of the state to be dismembered, fragmented and degraded as deliberate policy.” Others have written about the hollowing-out of government (e.g., Frederickson and Frederickson, 2006).

f. The very idea of “public” must be held suspect.

Decades of negative teaching and public messaging about the public sector have succeeded in reducing respect for government and the personal valuation of government service and products in many Western countries, and in the United States most sharply. I have already mentioned how students in most university economics courses learn about the superiority of markets over government from professors who transmit the reigning market-centric economics, and who speak of government as little more than an impediment to “efficient markets” while presenting public goods as a “problem” of “market failure.” The devaluation of government has also been accomplished by economists who have determinedly and effectively reached a broad public audience, such as Friedrich von Hayek, whose 1944 *Road to Serfdom* was converted into a “wildly successful” cartoon version that ran in *Reader’s Digest* and *Look* magazine (Mudge, 2014). Milton Friedman, “who *did more than any other economist of his generation to advance his belief in free markets*” (*The Economist* 2007), along with his wife Rose Friedman created a television series that ran for years on the Public Broadcasting System in the 1980s and 1990s.

More broadly, the rhetoric of “public” has been co-opted and defined negatively by those with market interests.

g. Private and public are not that different after all

Within public administration scholarship there has been escalating movement during the last several decades to advance the notion that public and private are “intermingled,” “blended,” “meshed”. Blurring the distinction between public and private works to the advantage of for-profit businesses and corporations who can then claim that their strategies, “partnerships” and profits are in the public interest. It also furthers the momentum toward the privatization and the contracting-out of government services.

Much of the theorizing of this blur has proceeded under the rubric of the “public value” movement within the field of public administration. This line of thinking arguably fuses government and private sector to the disadvantage of the public (Feldman, 2014). Some celebrate and others accept this movement toward debilitating fusion – Kettl (2015), endorsing “public-private interweaving”; Bozeman (2004; 2007 p. 18), explaining degrees of “publicness”; Light (2017), applauding the proper “meshing” of public and private. In the 1980s political scientist Ronald Moe (1987) stood witness to the first steps toward such a fusion and warned against it as a form of economic rationalization that would promote round after round of privatization.

“Promoters of privatization have been at the forefront of current efforts to mesh the public and private sectors...Implicit in the rhetoric of the Privatization Movement is the view that the public and private sectors are alike, both subject to the same set of economic incentives and disincentives. Many functions are interchangeable. Some promoters of privatization go so far as to argue that nearly all public sector activities are potentially amenable to being transferred to the private sector.”

As for the contention that "sector blurring" was not only present and inevitable but desirable, Moe wrote:

"While a certain fascination arises from the idea that the current complexity and ambiguity in organizational matters is an inevitable and desirable consequence of the complexity and ambiguity of life in general, this fascination is misplaced. **A line must separate that which is public, or governmental (while other meanings of public are important, these terms are used here interchangeably), and that which is private.** The configuration of the line may vary over time and with circumstances, but it is a vital line nonetheless and the **fundamental basis of this line is to be found in public law**, not in economic or behavioral theories" (emphases added.)

The impacts on people and the planet

The immediate implications of these seven popular characterizations of government put democracy in severe jeopardy, workers at risk of ill-health and shorter lives, and the planet under increased threat of waves of famine, flood, and extinction.

Mal-informed voters

In the wake of voter choices in the UK (Brexit) and the US (Trump), and the rise of the right-wing, so-called "populist" movements in a number of Western democracies, scholars and pundits are assiduously theorizing possible causes for what appear to be voters voting against their own best interests. A growing consensus is that voters have been ill-informed and, in many cases, subject to campaigns of disinformation or mal-information. As yet, there are no definitive solutions to this problem, but several of the causes are obvious: continuing campaigns to reduce popular trust in government, to blur the distinction between public and private operating spheres, and to assert the overarching wisdom of the market despite recurrent financial "shocks" and real estate crises.

Precarity, lower living standards; declining well-being, decaying infrastructure

Steep divides in annual income, increasingly precarious personal health and shelter, declining living standards for the working class, declining life expectancy (in the United States), declining societal well-being, and decaying infrastructure have been widely documented. Hollowed out, contracted out, and out of favor, central governments are no longer in a strong position to maintain the necessary services, income security, protections and infrastructures needed today, let alone to ward off future vulnerabilities or prepare for unintended consequences of technological successes.

Endangerment of the planet for human habitation

Globally, mainstream economics neglects the biophysical basis of production and slights the significance of energy in particular. Western democracies that have for decades indulged in the notion of the superiority of "free-market economics" and have glorified economic doctrines that are insensitive to the biophysical realities of production are presently pondering how to combat the evident negative impacts on the natural environment -- multiplying evidences of

climate change, environmental degradation, species loss and ocean acidification (among others) -- that ultimately endanger human habitation.

In sum

For the past several decades, we have witnessed the enfeebling of the public economy system, less and less capable of benefitting the polity as a whole; government has increasingly met the needs of the moneyed rather than the majority. In "Democracy and the Policy Preferences of Wealthy Americans", Page, Bartels and Seawright (2013) document disproportionate power of the wealthy over national policy in the United States, with the wealthy and the non-wealthy having dramatically different interests. Similarly, in "Persistence of Power, Elites, and Institutions," Acemoglu and Robinson (2008) distinguish between "de jure political power" and "de facto political power" with the latter being "possessed by groups as a result of their wealth, weapons or ability to solve the collective action problem." But in 1967, when James Buchanan began to sketch out his public choice thesis, the policy preferences of the wealthy elite were nowhere near as divorced from those of lower-income populations as they are now. Survey research from the 1960s cited by Buchanan showed that the wealthy supported "public spending programs of all sorts" as frequently as low-income respondents. Undoubtedly, the success of opinion leaders from the public choice school and of those who led the pro-market/free-market campaign accounts, in part, for the divorce.

Their successes have also resulted in a hollowing out of the state, a "dismembering" of government (Toynbee and Walker 2017a, 2017b). Over the past several decades, government has been so hollowed out in some democracies that it is questionable whether the state has the capacity, without serious efforts at institutional recovery, to undertake the expanded role that many progressives envision at this critical juncture. Stiglitz, for example, calls for "Re-Writing the Rules" (2015) and expanding government's role so as to achieve a number of goals like restoring full employment and making markets "more competitive." All of his goals require government action. He speaks about "the old economic model" and argues that in order to rewrite the rules, "we must re-learn what we thought we knew about how modern economies work." Left unaddressed in his call to action is the reality that over the last forty years the US government has been privatized, dismantled, disabled and outsourced, so that the public sector's administrative capabilities to take on huge new tasks have been severely compromised. Stiglitz specifies "what the old models got wrong" about how the market economy works, but his critique is limited to what is wrong with *market* economics. He does not address the *public economy or the lack of a conceptually solid public economics*. Given the extent of governmental dismemberment since the 1970s, the capabilities of the public sector cannot be truly restored until we have a coherent and comprehensive understanding of how the public economy actually works.

Over two decades ago, development economist Marc Wuyts summed up the problem:

"Once you assume that the state is a private institution like any other, then from orthodox economic assumptions, the prescription of competition emerges at once. Market failure may be a problem, but no viable alternative principle of economic organization to the market exists" (Wuyts, 1992, p. 73).

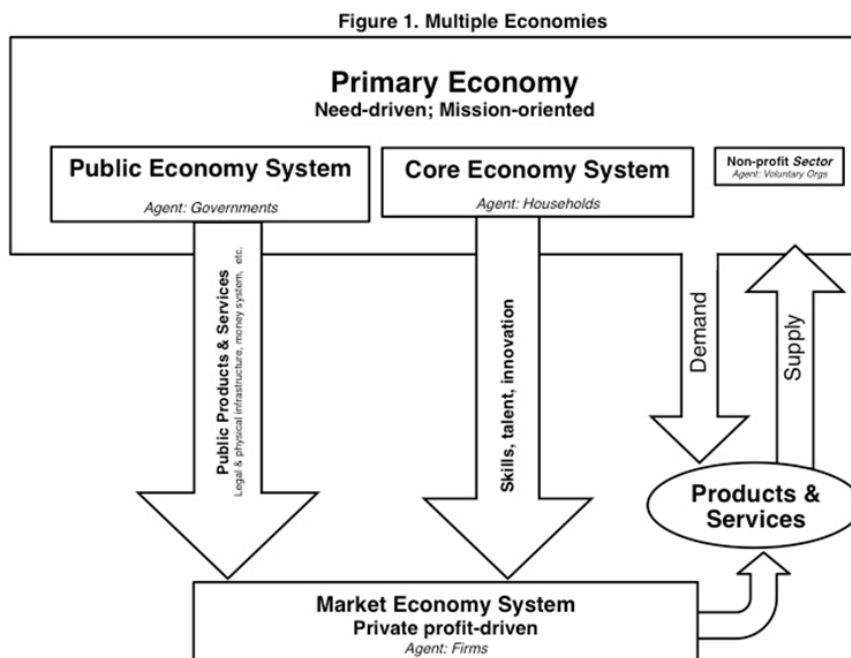
That is the vacuum that needs to be addressed.

3. Multiple economic systems

There is more than one economic system for producing things that people need and want. Or, as Neva Goodwin puts it in her essay in this volume, “Human economies can be understood in more than one way.”

As French economic historian Fernand Braudel (1981) argued half a century ago, societies have created multiple economies, not just a single, market economy. This plurality is rarely addressed by contemporary economics textbooks. Instead, generations of students learn only about “the economy,” meaning the market system. As Schultze (1977, pp. 13-14) has noted, modern economics research and teaching rests on “the ‘rebuttable presumption’ that the desirable mode of carrying out economic and social activities is...‘the private market.’” Government is considered no more than an intervenor in the private market, even though, as Schultze observes, “In most societies throughout history (and in many today), the presumption ran the other way,” a situation that “with only a little facetiousness...might be labeled ‘private intervention into the collective system.’” And while some economists do call attention to the fact that markets are societal creations (Polanyi, Goodwin, Mazzucato), the orthodoxy resists the reality of multiple economic systems and disdains recognition of non-market systems, whether that be the public economy (the public production system), the core economy²⁵ (households and communities), or the non-profit (charitable, NGO) sector.²⁶ While the present paper concerns the public economy, the core sphere (Goodwin et al., 2014, pp. 64-67) is also considerable, representing as it does the productive, unpaid, activity of households (none of which is counted in the calculation of GDP).

The constellation of non-market systems and the market system can be viewed as reciprocal. See Figure 1.



²⁵ Economist Neva Goodwin originated the term “core economy” to refer to the productive activities of households and communities.

²⁶ Bowman et. al. (2014) also speak of the “foundational economy,” by which they mean the sectors that produce the “mundane goods and services” that are: 1) necessary to everyday life; 2) consumed by all citizens regardless of income; and 3) distributed according to population through branches and networks. Examples include food, communications, transportation, and banking.

While these economic systems are interdependent and co-produce goods and services, the market system and the non-market systems are intrinsically different, with fundamentally distinct purpose, drivers and dynamics. As Colm (1936, p. 4) stressed “The fundamental difference between these [market and public] economies must be explained before their interrelationship in modern economy can be understood.” In one system – the market – the chief driver is profit. In the other constellation of systems – the non-market sphere – the chief driver is meeting a need: a household’s needs, a charity’s mission, or the collective needs of a polity. To our detriment, the only system that is routinely theorized in the current era is the market.

Economies and economics from a systems perspective

Empirically, economies are human-created systems (see Goodwin in this volume). A “systems perspective” is not new. François Quesnay, an 18th century physician and advisor to the king of France, and “often described as the ‘father of economics,’... used his medical training to understand the economy as a ‘metabolic’ system [in which] everything must come from somewhere and go somewhere...” (Mazzucato, 2018). It is time to restore such systems thinking to economic analysis, with special concern for drawing connections between economic systems and natural systems (Daly, 1998; Klitgaard, 2011).

To be sure, traditional economic textbooks speak of economic “systems.” Frequently the view is that there are three systems: market (exchange) systems; command systems and “mixed” economies. Especially perplexing is the term “mixed economy,” in which disembodied “government” takes actions that impact “the economy;” yet the means by which government functions goes unexplained.

Conceptualizing economies as *production* systems can be enlightening; conceptualizing the public economy as a production system may even provide a framework for ameliorating the negative impacts outlined in Section 2 above (also detailed in *The Public Economy in Crisis*; Sekera 2016). From a systems perspective, we can see most clearly what happens when resources are turned into products and services (Wenar, 2016). Hodgson (1988) takes a systems view to look at “purposefulness and choice”. A systems perspective enables us to address important questions of causality, directionality and impact. Additionally, a systems, or institutional (Galbraith, 2014), perspective enables us to understand “the conditions under which the organization can function and the conditions under which it fails.” No less crucially, viewing economic sectors as *production* systems facilitates the urgent need for economics to integrate the findings of systems ecologists concerning the *biophysical* bases of production (Hall and Klitgaard, 2012). Such a perspective is essential for incorporating an analysis of the biophysical imperatives and outputs of economic production, particularly the insufficiently studied output of *waste*.

Finally, adopting a systems perspective on economic activity enables us to reach finer discriminations and more cogent theories concerning purpose, dynamics and results. I will examine each of these with regard specifically to the public economy. My analysis is different from that of traditional systems theorists. As Bevir (2010) explains in a discussion of theories of democratic governance (pp. 51ff), “systems theorists... emphasize the self-organizing and self-producing properties of systems.” And “[a] transfer of information leads to the self-production and self-organization of the system even in the absence of any center of control.” In contrast, I take an approach that examines empirical, observable factors such as causality and destination (Mitchell, 2015), directionality (Mazzucato, 2018), drivers and forces (Hall and

Klitgaard, 2012). My approach also differs from that of the “systems dynamics” field which tends to analyze phenomena from a mathematical or quantitative perspective using simulation-based modeling and similar techniques. The approach outlined here might be called a *functional systems* approach – one that is best suited to examining and understanding a human-created system of *production*.

The simple conceptual structure is as follows: Economies are operating systems that have been created by humans. Such systems contain a number of elements: forces, such as purpose, that drive actors (agents); sources of power, such as energy and other resource inputs; dynamics between and among agents, forces and resources. And there are outputs and impacts that result from the system’s operation. To examine these with regard to the public economy, I turn next to understanding government as a system of production.

4. The public economy: theorizing a new public economics

In this section I outline basic elements of the public nonmarket economy. I present a conceptual model of the forces and dynamics of production within this distinctive environment. I explain how these characteristics differ from the market model and why those differences matter.

Government as a producer

Neither economics nor public administration theories adequately address the state’s function as a producer. Neoclassical economic theory squints at government through the lens of “market failure,” blind to government’s presence as a legitimate economic producer in its own right. Political economists are concerned with the “powers” of the state and of its branches, rather than its function as producer. The field of public administration deals with issues related to the state but does not engage with concepts of public economic production.

In reality, most of what government does is carry out production. This is the case whether done directly by government employees or contracted out. In the public products economy, production is shared between the legislative branch (with its powers to *authorize and appropriate*) and the executive branch, which bears the responsibility for actually *producing* those goods, services, standards, protections, risk mitigation products and other outputs that have been authorized and financed.

As context, once again I can do no better than to quote from Studenski’s essay, “Government as a Producer”:

“In every type of political organization known in human history, from the most primitive to the most elaborate, government has had to furnish services satisfying important needs of the members of the society, help them to make a living, influence their productive processes and consumption habits, manage economic resources to these several ends, and generally function as the **collective economic agent of the people**. The productive character of government activity was recognized by political and economic philosophers from ancient times down to the earlier part of the modern era” (emphasis added) (Studenski, 1939).

Studenski lays out the nature and centrality of public production:

“In the public economy...goods and services are produced which require the collaboration of all the members of society, and can generally be enjoyed by them only in common...The services and goods produced in the public sector serve to maintain organized society... [including] protection of life and property, the administration of justice, and the regulation of economic activity...They also provide specific aids to private production, such as roads, and improvements of rivers and harbors...Obviously, without the services of government, society would be in a state of chaos and all production would stop....” (Studenski, 1939)

Unfortunately, Studenski did not develop a theory of public production. What are the system’s drivers? Its dynamics?

The public economy – elements and driving forces

Regarded from the perspective of systems theory, the public economy is a system for production whose parts are designed to work “as a coherent entity.” That’s a quotation from Wikipedia, which also tells us that:

“A system is a set of interacting or interdependent component parts forming a complex/intricate whole...

There are natural and human-made (designed) systems. Natural systems may not have an apparent objective but their outputs can be interpreted as purposes. Human-made systems are made with purposes that are achieved by the delivery of outputs.”²⁷

And further,

“The goal of systems theory is systematically discovering a system’s dynamics, constraints, conditions and elucidating principles (purpose, measure, methods, tools, etc.) that can be discerned and applied to systems at every level of nesting...”²⁸

Those unencumbered definitions are fine for the moment, to keep things simple. Also, I will note the definition of economic production as crafted by the Bureau of Economic Analysis (BEA) for its 2017 handbook on National Income and Product Accounts,²⁹ used by OECD nations to calculate GDP:

Economic production may be defined as an activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital, and goods and services to produce outputs of goods or services. There must be an institutional unit that assumes responsibility for the process of production and owns any resulting

²⁷ <https://en.wikipedia.org/wiki/System>

²⁸ https://en.wikipedia.org/wiki/Systems_theory

²⁹ This BEA definition is also that used by the international System of National Accounts. (Bureau of Economic Analysis, “Concepts and Methods of the U.S. National Income and Product Accounts,” November 2017, p. 2-1.)

goods or knowledge-capturing products or is entitled to be paid, or otherwise compensated, for the change-effecting services provided.

In constructing a theory of the public non-market from a systems perspective, I must therefore ask the following questions:

- What is the system’s purpose? (destination, directionality);
- What causes public goods to be produced? (causality, drivers);
- What are the inputs? (resources);
- What are the system dynamics? (drivers, flows)?; and
- What are the results? (outputs and impacts).

Now we can begin to frame the elements of the public nonmarket economy. Figure 2 diagrams the conceptual framework.

Figure 2 The public economy: a system perspective

Conceptual framework

	Question addressed	Elements	Elaboration
Purpose	Why?	Purpose	“destination”, “directionality”
			“purpose is independently causative in the world” (Daly 2005)
Process	What’s used?	Resource inputs	Inputs: - Energy - Natural resources - Labor, talent, technology - Financial Capital
	How?	Drivers & Dynamics	Driving forces: - Collective choice - Collective payment Dynamics – relationships among driving forces, resources, agents Agent – government as the agent of the polity. Polity as ultimate driving force.

Product	What results?	Results	Outputs	<ul style="list-style-type: none"> • <i>products</i> • <i>services</i> • <i>benefits</i> • <i>standards; regulation (obligations)</i> • <i>thermodynamic waste</i>
			Impacts	<i>determined via analysis</i>

a. Systemic Purpose

Purpose: meeting a societal need

The fundamental purpose of public nonmarket production is to meet the unmet needs³⁰ of a society. While economics today lacks a theory of purpose-driven public production, this was not always the case. The idea of government as a “framework of collective agency for common purposes [was] endorsed by Wicksell (1896) and Gustav Cassel (1898).” (Sturn 2010, p. 291.) Even today, some economists and social scientists do talk about purpose, destination or directionality. Herman Daly (2005) tells us: “Through our choices, value and purpose lure the physical world in one direction rather than the other. **Purpose is independently causative in the world**” (emphasis added). Economist William Mitchell (2015) argues for a metaphor of purposes as destinations: “The destination must be prominent in the narrative and then we must specify the causal chains through which the purposes are achieved.” Mazzucato and Robinson (2016) speak of “directionality,”³¹ a concept correlative to purpose.

The idea that meeting “collective need” is the driving purpose of the public economy was of central interest to several theorists in the German Public Economics discipline (Cohn, 1887; Sax, 1887; Margit Cassel, 1924 in Sturn, 2010). Wuyts (1992), Desai (2003), Ranson and Stewart (1989, pp. 10, 12, 24), and Galbraith (1958, p. 242) also saw collective need as a central purpose of public production (though they generally didn’t use the term “production.”) But this perspective was obscured and eventually erased from standard economics.

Viewing purpose as a systemic driver or as “causative” (as per Daly) rejects the assertion that “market failure” is the rationale for government action. This approach is consistent with Colm and other more recent theorists, like Wuyts, and different from, but not totally inconsistent with Samuelson regarding “public goods.” Marc Wuyts (1992) argued that public goods are “socially defined and constructed” and “result from public action prompted by...perceived public needs.” He explicitly rejected “orthodox economic theory” in which

³⁰ Note that “needs” includes the needs of people, organizations, businesses, communities or the natural environment.

³¹ Directionality, a term also used in other social sciences, is said to concern “vertical” or “horizontal” direction. The usage may be derived from Samuelson. The following is from Desmarais-Tremblay, 2017: “He [Samuelson] acknowledged being driven by aesthetic ideals, notably in his contribution on collective goods: ‘My aesthetic sense was tickled by the beautiful duality displayed by public and private goods and their “prices”—the **vertical** addition of **public-good** “demands” as against the **horizontal** addition of **private-good** “demands,” the “+ and =” dualities”’ (‘Public Goods Twenty Years Later,’ June 1974, Samuelson Papers, box 143, p. 2, emphases added).

“public goods are defined solely with respect to the *inherent characteristics* of the goods and services concerned” (emphasis added).

Wuyts’ distinction is a crucial one. And he is empirically correct. Public goods are not defined by some inherent characteristic, like “non-rivalry” or “non-excludability” as Samuelson (and some in the German Public Economics group) would have it and as millions of students have learned in economics courses all over the world. Any classic Samuelsonian example – whether it be lighthouses, fireworks or warfare – has been provided both by market agents for profit and by government (Sekera, 2014). It is futile to try to draw a line of demarcation between state and market based on some hypothesized innate distinctive qualities of the goods or services themselves. This argument has been made before, but lost to mainstream teaching on public goods. “The line of demarcation between [public and private] is constantly changing in accordance with the practical needs of the day,” said Keynes (1927). Colm argued that “the line of demarcation between public and private tasks is a flexible one, changing with changing public opinions, with changing weight of interest and political groups’ (Colm, 1936, p. 6); ‘not scientific calculation but the political struggle defines this line of demarcation.’” Goldscheid too, made a similar argument: “Goldscheid envisaged the profile of state activities as something that is determined by political struggle and not by theory-guided optimization exercises” (Sturn, 2010, p. 300).

Whether we have public schools or only private education, public “freeways” or private toll roads; private fee-charging fire services or public fire departments – all of these, and everything else produced by the public economy, stem from a decision made ultimately by the polity in a democratic nation-state (or by another type of “sovereign” in other forms of governance; see discussion of “sovereignty” below).

How, then, can we think of public purpose – meeting “collective need” – as causative from a systems perspective? Various taxonomies of collective needs and public purposes have been suggested in the past. I offer the following categorization of *the purposes of public production*:

- to supply goods or services not supplied by other means;
- to solve multifaceted or complex social, technological or economic problems;
- to make particular goods or services accessible to all regardless of ability to pay; or
- to achieve single-provider efficiencies (economies of scale; network effects) that simultaneously ensure universal access.

Non-market production is need-driven, not demand-driven.³² In the public non-market, needs are articulated and become a systemic driver through distributed decision-making -- the process of electorally-manifested collective choice, a system “by which individual preferences are socially structured” (Gutmann, 1987, p. 134, quoted by French, 1998, p. 339). This process is detailed in the next pages.

In some Western nation-states, advocates of marketization have gone to great lengths to stub out all reference to public purpose as the “destination” of government actions. Their agenda has been facilitated by the absence of a concept of systemic purpose in economic

³² Wuyts 1992, but cf. the work of economist Geoffrey Hodgson (2013), who distinguishes “needs” from “demand,” which is a function of preferences and the ability to pay (Tankersley, 2014, p. 671).

production theory. In filling that vacuum, we can look back to earlier theorists and restore the concept of collective-need/purpose-driven public production.

b. Resources

Production can be defined as the conversion of resources into goods and services (Goodwin et al., 2014). Put another way, production involves the conversion of *inputs* into *outputs* (e.g., Lipsey and Steiner, 1981).

Traditionally the inputs were triune: “land, labor and capital”. In the BEA definition (above), inputs are “labor, capital, and goods and services.” The labeling of inputs has varied over time depending on interests. For purposes of this paper, there is no need for a general description the inputs to production. Nor do I have reason to consider the neoclassical “production function”. The input I want to focus on is energy.

But before that, a word on financial “capital”. In the public non-market economy, the source of capital for production is *collective*. This is key: in the public non-market economy, collectively-raised capital is not just a “resource” but is a *driver*. This is one of the signal differences that distinguishes public from private production. Unless this is well and widely understood, we can have no strong conceptual footing for withstanding the all-pervasive and otherwise persuasive pressures today to turn government agencies, programs and services into money-generating operations. If we yield to such pressures, we will face such perversions of public purpose as “policing for profit” and infrastructure schemes to serve private profit-makers rather than meet public needs.

The intended result of the public economy collective-choice, collective-payment production process is that goods, services, benefits, and protection can be accessed without regard to personal wealth – to be free or below cost at the point of receipt or usage. Displacement of this *systemic* purpose, such as by making revenue-generation a goal, results in system malfunction by necessity and by definition. Of course this systemic purpose is, time and again, ignored or over-ridden by those who privatize and marketize government and who force public agencies to become fundraisers instead of performing their fundamental missions. But such perversion is all the more likely in the absence of an understanding of the centrality of collective payment as a systemic driver.

Biophysical imperatives and thermodynamic waste

The disregard of biophysics

Just as mainstream economics ignores the existence of the public non-market economy, it disregards the biophysical basis of production (Hall et al., 2001), and the role of energy in particular. In *Energy and the Wealth of Nations*, Hall and Klitgaard (2012) show that economics for the most part has “treated energy not as a critical factor of production but only as another commodity to be bought and sold” (p. 8). They argue that treating natural resources and energy “simply as a commodity or as an externality” imperils future development and production.

The second law of thermodynamics tells us that waste is an intrinsic feature of the use of energy in production. But there is a qualitative, and controllable, difference between the level of unavoidable waste generated by matter-energy transformation and *the gratuitous waste*

inherent in the predominant corporate business model, a wastefulness that goes unaddressed by market economics.

Market mimicry in the public domain undermines the ability of the state to achieve public purpose, which in turn exacerbates the depletion of natural resources, stymies solutions to climate change, and thwarts a transition to renewable energy sources affordable to all. If mainstream, market-based economics blithely disregards the biophysical constraints on production, certainly a new public economics cannot.

Biophysical imperatives and constraints on production

The imperatives of thermodynamics are everywhere inescapable, none more so than the waste associated with all production. Precisely how these imperatives can be integrated into a systems theory of public production remains to be worked out.

One might start by focusing on the source and sink functions of the natural environment. As Cleveland (1987) explains,

“One of [Herman] Daly’s (1985) most insightful contributions to biophysical theory was his critique of the conceptual model of the economic process found in most introductory textbooks...exchange value embodied in goods and services flows...Daly argues that the circular flow model is seriously incomplete because it focuses on the circular flow of exchange value (i.e., money) rather than the throughput of low-entropy natural resources from which all goods and services are ultimately derived. Daly emphasizes that the circular flow of exchange value is coupled with **a physical flow of matter-energy which is not circular. The matter-energy flow is linear and unidirectional, beginning with the depletion of...resource stocks from nature and ending with the pollution of the environment with...wastes.** In this view, *nature* is the ultimate *source* of the raw materials necessary to produce economic value, as well as the ultimate *sink* for the unavoidable by-products of the production process” (emphases added).

Also, as Cleveland (1987) further notes:

“For Georgescu-Roegen, the economic process is unidirectional – what goes in is valuable, low-entropy energy and matter, and what comes out is valuable goods and services plus high-entropy waste heat and degraded matter.”

Figure 3

The Biophysical Basis of Production



The need to recognize the biophysical imperatives of production has been receiving more attention since the turn of the millennium, but it remains an underdeveloped topic in terms of public policy and public economics. But, again, there are guideposts for moving forward.

In “The Illth of Nations and the Fecklessness of Policy: An Ecological Economist’s Perspective,” Herman Daly observed that,

“Policy dialog would make no sense unless there was a real criterion of value by which to choose from among the alternatives. Unless we can distinguish *better from worse states of the world* then it makes no sense to try to achieve one state of the world rather than another.”

Having shown how “The concepts of throughput, of entropy...are foreign” to “mainstream neoclassical economists,” Daly argues for a **policy of “non-wasteful sufficiency”** (emphases added).

Other economists and natural scientists have gone a step further and argued for an “energy standard of value” (Cleveland, 1987):

“Odum (1977) argued that energy was the source of economic value. He pointed out that wherever a dollar flow existed in the economy, there was a requirement for an energy flow in the opposite direction. Money is used to buy goods and services, of necessity derived from energy... Economists have generally reacted strongly against many of Odum’s economic theories in large part because he believes that low-entropy energy is the ultimate source of economic value – a so-called energy theory of value which is unpalatable to neoclassical economists.”

“Costanza (1980, 1981) ...analyzed the relationship between the direct and indirect energy used to produce a good or service in the US economy...

Costanza (1981) used this empirical evidence to argue for an embodied energy theory of economic value which maintains that the value of any good or service to humans is ultimately related to the quantity of energy directly and indirectly used in its production.”

In *The End of Normal*, James K. Galbraith (2014) focuses on the biophysical realities connected with economic activity, and explains why these have not been readily taken up by mainstream economics. Summarizing the work of Georgescu-Roegen, Galbraith writes: “economic activity... consists in concentrating useful energy, in deriving satisfaction from it, and in releasing the residues as waste.” But, as he points out,

“To suggest that resources were limited and their distribution inherently unjust – that was a task for the unfashionable fringe. To admit that the country was living high on the world’s resources was also to raise sticky moral questions about the lifestyle of everyone in America, including one’s own.”

The difficulties and denialism continue. In a recent paper on “The Energy Pillars of Society: Perverse Interactions of Human Resource Use, the Economy, and Environmental Degradation,” a group of systems ecologists spelled out the barriers to change (Day et al., 2018):

“[While] the renewable energy transition is a topic that is justifiably receiving increasing attention in both public discourse and the scientific literature, [w]e believe that the inherent difficulties in effecting this transition are not sufficiently considered. [A] a central goal of this [paper] is to call attention to the need to do more comprehensive and system level thinking about the significant challenges of replacing fossil fuels and mitigating environmental stressors that lay ahead... [D]eveloping future energy policy requires a systems approach with global boundaries and new levels of appreciation of the complex mix of interrelated factors involved.”

Despite these complexities, a “biophysical economics” movement has been gathering momentum (Hall and Klitgaard, 2012; François-Xavier Chevalleray, www.BiophysEco.org). If it has not yet revolutionized mainstream economics, its findings can surely be incorporated into a new *public economics*. This is critical, since the last half-century has made it painfully obvious that solutions to the problems of gratuitous production of thermodynamic waste by market actors will *not* come from the market.

The challenges we face are unprecedented. In a paper on “EROI of Different Fuels and the Implications for Society,” Hall, Lambert and Balogh (2014) conclude:

“The decline in EROI [Energy Return on Investment] among major fossil fuels suggests that in the race between technological advances and depletion, depletion is winning... Thus society seems to be caught in a dilemma unlike anything experienced in the last few centuries.”

The paper by Day et al. (2018) is even more stark. The authors, ecological scientists who don’t normally tread into the realm of public policy, pose the dilemma that societies will have to confront: the competition of resources needed for two courses of action – energy transition versus mitigation of climate change impacts.

There will be a competition for resources for:

- **transition to renewables:** developing renewable energy sources, and necessary infrastructure, in order to replace declining stocks of high net yielding fossil fuels, and;
- **mitigation:** investments to mitigate the effects of environmental degradation and associated social and economic upheaval, due to already-locked-in impacts of climate change.

Deciding on the tradeoffs to be made, developing viable new energy sources and financing a course of action is, they write, the “grand grand challenge of the present century, and we believe that this challenge will decide the fate of our planet and humanity for generations to come.”

Solutions and the necessary leadership cannot come from the market. The market is not constituted to produce solutions to extraordinarily complex, technological common-need problems. Nor can it meet essential basic needs and supply products to all regardless of ability to pay. The inherent driving forces of the market system – short time horizons, growth as a requisite, the inability to operate indefinitely without profits – as well as the gratuitous waste baked in, render the market system incapable of producing solutions to the coming dilemma. The solutions require long time-horizon investments with no immediate payoff in terms of saleable products, no visible ROI, no profit-making in the near-term. Such investment can only be generated in the non-market environment of the public economy, in which financing is collective and financial profit is not the point, and which is driven by public purpose. Solutions must originate through collective action, public leadership and the public economy.

Yet, policymakers – elected leaders, their advisors, and the public servants who write policy “options papers” for them -- have been taught to embrace “market solutions” for every sort of societal need, from education to infrastructure, food security to national security. “Market solutions” is the tsunami that has swept in across the public sector, “public-private-partnerships” the perpetual hurricane that has been flooding all offices of government for more than 30 years. What is needed is a new public economics that comprehends and embraces the public purposes of the public domain, that recognizes and incorporates biophysical imperatives, and that enables the long-term investments on behalf of long-view solutions that both solve the problems and serve the polity.

c. Drivers and dynamics

In the public non-market, the most basic drivers and dynamics of mainstream economics do not apply. In the central dynamics of the public products economy there are no “buyers”, no “sellers”, no “exchange.” There is no market-model competition, but only “pseudo-privatization” (Siltala 2013). The purpose is not profit but meeting identified societal need. Satisfying “customers” does not produce revenue. There are no “customers” -- people don’t pay directly; they pay collectively. In a non-market, outcome goals are devilishly difficult to define – unlike the simple market goal of maximizing profit. Results are often obscured because of factors unique to non-markets, where *invisibility* of outputs and *absence* of harmful conditions are hallmarks of success (Sekera, 2016).

How can we analyze, understand and demonstrate the component elements of this system, its drivers and its dynamics?

The place to start is with the two most fundamental driving forces: collective choice and collective financing. Then we will look at these drivers in relation to event-causation.

Collective choice and collective finance

Public administration scholars Stewart Ranson and John Stewart (1989,1994) have argued that public goods and services “are provided following a collective choice and financed by collective funds.” (1994 p 55). Indeed, empirically, those are the two chief forces, in addition to public purpose, that drive the public production system.

Collective choice

In the public non-market system, collective choice replaces the “demand” of the market system. In democratic nation-states, public, non-market goods and services originate through the complex process of collective choice in the polity -- i.e., voting. (In non-democracies, choice is not collective, but rather is that of whatever entity is the sovereign; see the discussion below concerning sovereignty.)

For over a century, economics has not understood collective choice as a generator of production in the public economy. Instead, economic theory has focused on mathematical modeling of forms of collective choice and the “rationality” of various possible voting procedures. Economics students learn about the “collective choice problem” and ingest Arrow’s “impossibility theorem.” Amartya Sen, who has been studying and writing about collective choice for over four decades, has acknowledged (Sen, 1999, p. 364) that “Impossibility results in social choice theory...have often been interpreted as being thoroughly destructive of the possibility of reasoned and democratic social choice.” But he goes on to say that he has “argued against that view.” Although Sen wrote an entire book on collective choice (*Collective Choice and Social Welfare* 2017 [1970 updated]) in which he proved both mathematically and logically that Arrow’s impossibility theorem need not undermine the validity of collective choice in the real world, Arrow’s work spawned an industry of economists debating his findings. “[F]orty years and a thousand books and articles later, scores of economists are still writing about variations of Arrow’s work.” (Stretton and Orchard, 1994, p. 59). While Arrow eventually admitted the lack of utility of his formulation in actual governance, “in other minds, perhaps keener on doing maths than understanding government, rigorous unrealism persists.” (Stretton and Orchard, 1994, p. 62).

In the real world, in democratic nation-states electorally-manifested collective choice is the generative source of public products. Public products are not created in response to demand. Instead, a variety of products – goods, services, benefits, protections, standards – originate from the complex decision-making dynamics of collective choice and collective financing. In contrast to the “supply and demand” dynamic of the market environment, this dynamic is more complex at every level.

Since the late 19th century, few economists have accepted the process of collective choice as a legitimate replacement for the market concept of demand. One exception is Richard Musgrave:

“Since the market mechanism fails to reveal consumer preferences in social wants, it may be asked what mechanism there is by which the government can determine the extent to which resources should be released for the satisfaction of such wants...A political process must be substituted for the market mechanism.”³³

In his 1937 dissertation, Musgrave talked about “socially interpreted individual wants” and “collective wants.” According to Desmarais-Tremblay (2017, p. 63) “Musgrave assumes there exists individual wants, and collective wants proper. Most of the first ones are satisfied within the market economy, **but the public economy may satisfy both collective wants proper and ‘socially interpreted individual wants’**” (emphasis added).

Musgrave’s reasoning built off of the thinking of some of the late 19th and early 20th century public economics theorists. For example, Margit Cassel, Emil Sax and Knut Wicksell all theorized about collective choice as a mechanism in the public economy (Sturn, 2010).

And, in this century, we have, for example, Stiglitz (2000, pp. 15, 156-57):

“In the public sector, choices are made *collectively*. Collective choices are the choices that a society must make together...Unlike expenditures on conventional private goods, which are determined through the price system, expenditures on public goods are determined through a political process....Individuals vote for elected representatives, these elected representatives in turn vote for a public budget, and the money itself is spent by a variety of administrative agencies.”³⁴

Other social scientists and public administration scholars have elaborated on the collective choice process.

In the 1990s public administration scholars Stewart Ranson and John Stewart (1989, p. 10) weighed in:

“...choice has to be made from a number of competing claims. There will be arguments about needs, spillovers, rights and obligations. Collective choice is political because **these disagreements and conflicts of interest have to be resolved before social life can proceed. Collective conflict has to resolve into collective choice**” (my emphasis).

Ranson and Stewart (1989) go on to link collective choice to public purpose, arguing that that collective choice is a process through which “differing interests are resolved, and conflict and argument lead to decision and action” (p. 7). The “public domain will value and chose to provide those goods and services which are regarded as essential to the community as a whole” (p. 7). “The essential task of the public domain can now be interpreted as enabling authoritative public choice about collective activity and purpose. In short, it is about clarifying, constituting and achieving public purpose” (p. 10).

³³ The quote is from Michael Albert and Robin Hahnel, “[A Quiet Revolution In Welfare Economics](#)”, but Maxime Desmarais-Tremblay (2013) provides a more extensive analysis of Musgrave’s work.

³⁴ Although Stiglitz gives a rhetorical nod to collective decision-making through the political process, he reverts to standard economics modeling, using the “collective demand curve,” to explain what he calls “the demand” for public goods.

Writing about “shared social responsibility,” political sociologist Claus Offe (2010, p. 95) makes a similar point today with regard to “self-binding acts of pre-commitment: at their origin stands the political, collectively binding *choice*, made in the past by some winning coalition of political forces.”

And, from Amartya Sen, *Collective Choice and Social Welfare* (2017 p. 32): “...there are political decisions that a society has to make for which the procedure of voting remains a major route to social choice.”

In 2002 public management scholar John Alford added the important clarification that “collective choice is a mediated process because it is articulated through the channels of representative government.” His elaboration (p. 339) on the mediated nature of this process gives a sense of the *profound complexity* of the public sector:

“This collective choice is not simply an aggregation of the preferences of individual citizens (Carroll, 1995; Pagnato, 1997). Such an aggregation would be very difficult to achieve because each citizen has different wants and aspirations. Collective choices, therefore, are necessarily the outcome of political interaction and deliberation, in which citizens or their representatives engage with each other in advocacy, debate, and negotiation (Lynch and Markusen, 1994; Patterson, 1998). Sometimes these processes manage to reconcile conflicts or identify convergent interests, but often they do not. When they don’t the political process follows some procedure, usually enshrined in a constitution, for arriving at authoritative determination...”

Nearly a century ago Austrian economist Emil Sax expounded on the complexity of the mediated process of collective choice. Sturn (2010) discusses a 1924 article by Sax in which Sax sketches

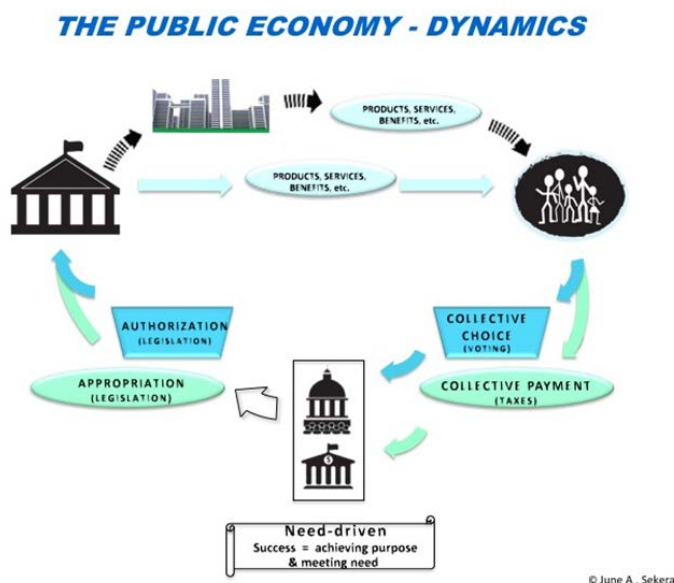
“his ideas concerning the **complexity** of the collective choice processes (including **democratic voting**) and informational mechanisms used for the practical implementation of the theoretical optimum (Sax 1924: 339). His emphasis on the manifoldness of potential channels of information, frameworks of decision and motivational settings is guided by a concern for ‘realism’. Sax (1887; 1924) emphasizes and systematizes the potential role of non-egoistic motivations (collectivism, mutualism, altruism) in the public economy” (emphasis added).

In sum, collective choice is achieved through a process with the following attributes: it is carried out via a procedure established by a polity (e.g., nation-state); it represents aggregated individual preferences (values, needs and wants); it is expressed following a process of argumentation, disputation and contention; it is intermediated by elected representatives (except for referenda, which are aggregated but un-intermediated). (Stewart & Ranson, 1989, 1994; Sen, 2017; Gutmann, 1987; Musgrave in Desmarais-Tramblay, 2013, 2017; Alford, 2002.)

It is important to emphasize that in democratic states, collective choice in the public economy production process is *intermediated* and subsequently *concretized* in law, which authorizes and finances production.

The process is represented in the Figure 4 below.

Figure 4



Does voting “work”? Scholars have wrestled with this question. But so have civic leaders and activists, since voting often appears to disappoint as an effective mechanism for the expression of collective choice. Too many don’t vote; elections are bought by those with the most money; those who would like to vote are denied the ballot by technical and discriminatory measures. However, the question at hand is not whether the system works well, but to understand *how* it works.

It is crucial that we better understand the function of real-world collective choice – voting – in producing public goods and services. Our general appreciation of the nexus between voting and economic public production has been undercut by those mainstream economists who insist on the priority and superiority of individual choice. Whether in the guise of public choice economics, Arrow’s Impossibility Theorem, the writings of Coase or Hayek, or the various masks of rational choice theory, mainstream economics has exhibited an elemental “hostility to democracy” – and here I am quoting an economic historian, Philip Mirowski (2015).³⁵

Law: the way collective choice is concretized

Mediated collective choice – through voting – results in the selection of representatives who concretize collectively expressed decisions. These elected intermediaries prioritize needs and wants by enacting laws whose purpose is to produce some specified good, service, benefit or protection.³⁶ “Public purpose” is thus embodied in the concretized collective choice: enacted legislation. In this formulation (and in the real world), **collective choice is not mere theory. In the public economy system, collective choice is rendered operative, made actionable. It results in an operational outcome: a lawmaker is chosen; laws are enacted.** The public mandate that is manifested through mediated collective action is the basis for public production, but proximate causes of public production are authorizing

³⁵ Mirowski (2015) was pointing principally to microeconomics, but he implied that the charge could also be levied against aspects of macroeconomics.

³⁶ See text box, next page on “Public Bads?”

legislation and appropriating legislation. In the public domain, law authorizes and triggers both action and financing.

Once authorized and financed, public production is carried out by the elected and appointed leaders and the civil service managers and workers of government. (This is the case even where the supply of public goods and services has been contracted out; even in those cases, governmental leaders and employees are ultimately responsible for overseeing production and are accountable for the results.) But there has been inadequate attention to a debate that has been hidden in the shadows in public administration scholarship about whether law is the basis for public administration practice. While it once seemed indisputable that law was the source of agency in the public domain, that assumption was questioned with the rise of other management philosophies in the 20th century. An important paper by Laurence Lynn (2009) traces the evolution of this change.

Lynn's paper, "Restoring the Rule of Law to Public Administration: What Frank Goodnow Got Right and Leonard White Didn't," explains that law both grants public administrators the authority "to achieve public purposes" and bounds the discretion those agents are allowed to exercise in carrying out their work to achieve that goal. "As both agents and principals of the law, public administrators necessarily play an essential role in defining what the rule of law means in practice..." As Lynn explains, Frank J. Goodnow, "regarded as the 'father of public administration'" saw law as the basis for administrative and managerial action (Goodnow, 1886). This view evidently was generally accepted until challenged by the assertion of Leonard D. White, in his 1926 textbook – the first in the field – that "the study of administration should start from the base of management rather than the study of law and is therefore more absorbed in the affairs of the American Management Association than in the decisions of the courts." The thrust of Lynn's paper is to challenge this "pronouncement" by White.

It seems that, just as economics dropped the line of thinking that saw production as the source of value more than a century ago, public administration scholarship lost the train of thought that law is the basis of public management. Indeed, one can find *cris de coeur* in the critical literature on New Public Management and public value theory in public administration warning that the concept of the rule of law has been abandoned amongst the interest in "networked governance," "citizen participation," "citizen co-production," "deliberative democracy" and the like. Lynn and others he cites are attempting to re-invigorate the lost perspective. He concludes that "Law is the root system of public administration" and that "Ensuring that the rule of law is real must be a central commitment of public administration education" (2009, p. 810).

“Public bads?”

Not every law is viewed as “good” (in the moral sense) by everyone. Some legislative actions produce what some in the population would see as “bad.” Deneulin and Townsend (2006) raised and addressed this issue:

“[H]ow is the common good generated or nurtured and how can we ensure that the common life of a community is good and not bad?...We emphasise here that there is no guarantee that participation in common action will generate something genuinely good. It might lead to bringing into power a government which might use nuclear weapons or which introduces unjust structures such as those of Apartheid. Human actions are always fallible because they are human. However the ‘possibility of moral evil is inherent in man’s constitution’ does not nullify the claim that the good for each of us is found and sustained in relationships, whether at the level of the community of the family, village, country or world, and the public policy ought to recognize and nurture them if it is not to undermine the human well-being.”

Collective finance

Individual payment is fundamental to the market both theoretically and empirically. In the market model, individual buyers maximize their utility and individually pay. And in the real world market economy, as in the model, access to products and services is expressly contingent on ability to pay.

In contrast, in the public non-market system the cost is intended to be socialized; financing must be collective for the system to work. Supply is to be free at the point of delivery or with fees that are not economically significant.^{37,38,39} Non-market production is **systemically not** meant to yield income or profit. Imposing a goal of revenue-raising to cover the costs of production is inimical to the inherent purpose of public goods production.⁴⁰ Yet, in the real world, public non-market production is increasingly forced to yield income rather than meet a collective need (or sometimes yield income in *addition* to meeting a need, making mission-fulfillment often impossible.) This is a perversion of systemic purpose and should be understood as such. It is not merely a matter of social justice, though that’s often the case. Installing or increasing fees in order to replace collective financing results in systemic dysfunction.⁴¹ ***When income-generation is made a purpose of public production, the system inevitably will malfunction.***

³⁷ See definition of “prices that are not economically significant” in *NIPA Handbook – Bureau of Economic Analysis*, Nov. 2011.

³⁸ Public communications about the UK’s National Health Service capture this purpose precisely, as they say the NHS is “free at the point of delivery” or “free at the point of use”.

³⁹ Any fees that may be paid by users are not, or should not be, intended to cover the costs of production.

⁴⁰ The only justification to make revenue-raising a goal is to raise money to cross-subsidize the supply of other public goods.

⁴¹ Of course, some public services, like the US Postal Service, have been required to cover all costs with revenues, tossing out the concepts of collective payment and universal access.

That verity didn't stand in the way of David Osborne and Ted Gabler, who were the progenitors of the "Reinventing Government" movement rolled out by President Clinton and Vice President Gore in the 1990s. (Reinventing Government was the US version of the so-called "New Public Management" movement of government privatization and marketization that took off in many Western democracies in the 1990s). In a 1994 essay wonderfully titled, "Can Markets Govern?" Lynch and Markusen explain that in this "reconceptualization of government in business terms" governments should be "relying more on fees than taxes, and investing their resources so that they are 'earning rather than spending.'" That this approach was embraced not only by conservatives and business interests, but also by Democrats in the US and Labour in the UK stands as testimony to the absence of any compelling argument or concept to illustrate the fatal flaws of this thinking.

Again, there is a void. Collective payment is neither recognized nor accounted for in the market "exchange" construct. While mainstream economics discusses taxes at length and speculates about their influence on individual behavior and their "distortion" of market activity, it does not deal with the implications of collectively-raised capital for the public system of production, or what might be better called "collective finance." Nor does the extensive field of "public finance" contribute to understanding the systemic dynamics of public production.

Collective financing is an extraordinarily complex process entailing distinct actions by different groups of agents. In contrast to utility-maximizing individual choice and payment in the market, the financing source for goods and services in the public non-market is collective. In the market, while financing for initial production is from investors (whether an individual owner or shareholders/lenders), financing for continued production is largely obtained from payments by customers. Not so with public production. In the public system of production, those who use or receive public goods and services do not pay the producer directly. This single fact introduces a complexity into public production that does not exist in the market: a third-party agent (legislature, council, parliament, congress) that actually supplies money to the producer so it can produce. The pooled financial resources of the polity are put to use only after a process of legislative appropriation.

Another complexity arises from the fact that there are basically two ways the public sector "finances" the outputs it creates: expenditures and tax expenditures.

"Expenditures" includes both current spending (on services like education or public health) and investment, as in roads or innovations. One might distinguish "spending" from "investment," but the distinction is unnecessary in this paper. "Expenditures" may be financed by taxes, debt or money creation. Debate rages about public financing mechanisms. In modern monetary theory (MMT), for example, money creation by government precedes payment of taxes, which are conventionally considered the source of revenue for government financing. But even assuming MMT theory is correct, money creation is the result of collective choice by the polity: the authority to create money comes from the legal structure of the public economy system, which was collectively originated. Again, it is unnecessary to delve into the details of financing mechanisms for purposes here.

In the market model, the source of financial capital for production is money in the form of cash, debt or equity investments. In the public non-market, outputs can be produced and goals achieved through "tax expenditures" (tax credits, exclusions and other legislated forms of tax exemption financing) wherein the producer – a government agency – makes no outlay of money.

Tax expenditures are rarely thought of as a financing source for production of goods and services. But, as noted by Marr et al. (2013) of the Center for Budget and Policy Priorities (CBPP), “The distinction between tax breaks and spending is often artificial and without economic basis.”⁴² The Joint Committee on Taxation (2014, p. 2) explains that “Special income tax provisions are referred to as tax expenditures because they may be analogous to direct outlay programs and may be considered alternative means of accomplishing similar budget policy objectives.” Wikipedia (2015) is most blunt: “A tax expenditure program is government spending through the tax code.”

The complexity of collective payment has consequences not found in the market:

- Payers are often unaware of what they have paid for via their taxes or other shared-financing mechanisms.
- The size of the producer’s budget is determined by elected intermediaries; it does not grow or shrink based on customer satisfaction.

In contrast, the market mechanism for payment (from buyers) and income (to producers) is simple: payment is made directly to the seller/producer: and satisfied buyers are the source of a firm’s income. The size of a firm’s budget is a function of payments from buyers.

Collective payment means that the size of a public agency’s budget is not determined by satisfied clients, users or recipients of services or goods. Rather, income to producers (government agencies) is a result of decisions by elected representatives. Thus, income to the producer is *not* connected to effectiveness: whether recipients/users are satisfied or dissatisfied, or whether the specified public need has been met is, by and large, unconnected to whether the producer receives income. Income to the producer may be terminated even when production has been effective, a public need is being met, and the recipients of goods and services are satisfied. Conversely, funding may continue even if the identified need is not being met.

Such un-market-like dynamics are usually cited as symptomatic of the “dysfunction” of government. But it is time to stop squinting at the public sector through a market lens and to see the public economy from a systems perspective and to understand government as a producer. Only then will it be possible to understand the dynamics of the public non-market financing system and the centrality of *collective* finance to its effective operation.

Without such an understanding, it is easy for market ideologues and profit-making interests to sell the idea that government agencies should make revenue-raising a purpose. Raising money is not their purpose; meeting a societal need is. For the system to operate effectively, financing must be collective. Wherever the idea takes hold that public agencies should raise their own revenues, we find a loss of public goods, as in exclusionary pricing of entry to US national parks or, more invidiously, policing for profit. Police killings of unarmed citizens and other tragic police interventions have been convincingly linked to “unconstitutional” profit-driven policing (Shepard, 2015, *Harvard Law Review*).

⁴² Tax expenditures have been used to finance a large array of public products or benefits, including education, health care, business expansion, and home ownership. Marr et al. (2013) revealed that in 2011 tax expenditures (\$1.072 trillion) cost more annually than either Social Security (\$725 billion) or Medicare (\$755 billion).

Dynamics: event-causation

What causes production to happen?

From a systems perspective, this is a question of event-causation. The “event” in question is production.

So far I have argued that purpose is causative (following Daly) and that the chief driving forces of the system are collective choice and collective financing.

As to what instigates production, contrast once again the market and public nonmarket systems. A firm may be motivated to produce by an entrepreneurial inspiration, an invention, a desire for financial gain, or other (even humanitarian) reasons. But, at bottom, production is instigated after an assessment of whether the producer can charge, *and can get*, a price that will cover both the cost of production plus the desired profit margin. **The instigation of production (the decision to produce something) is a function of projected price viability.**

In the public sector, in contrast, the instigation of production is a function of mediated collective choice.

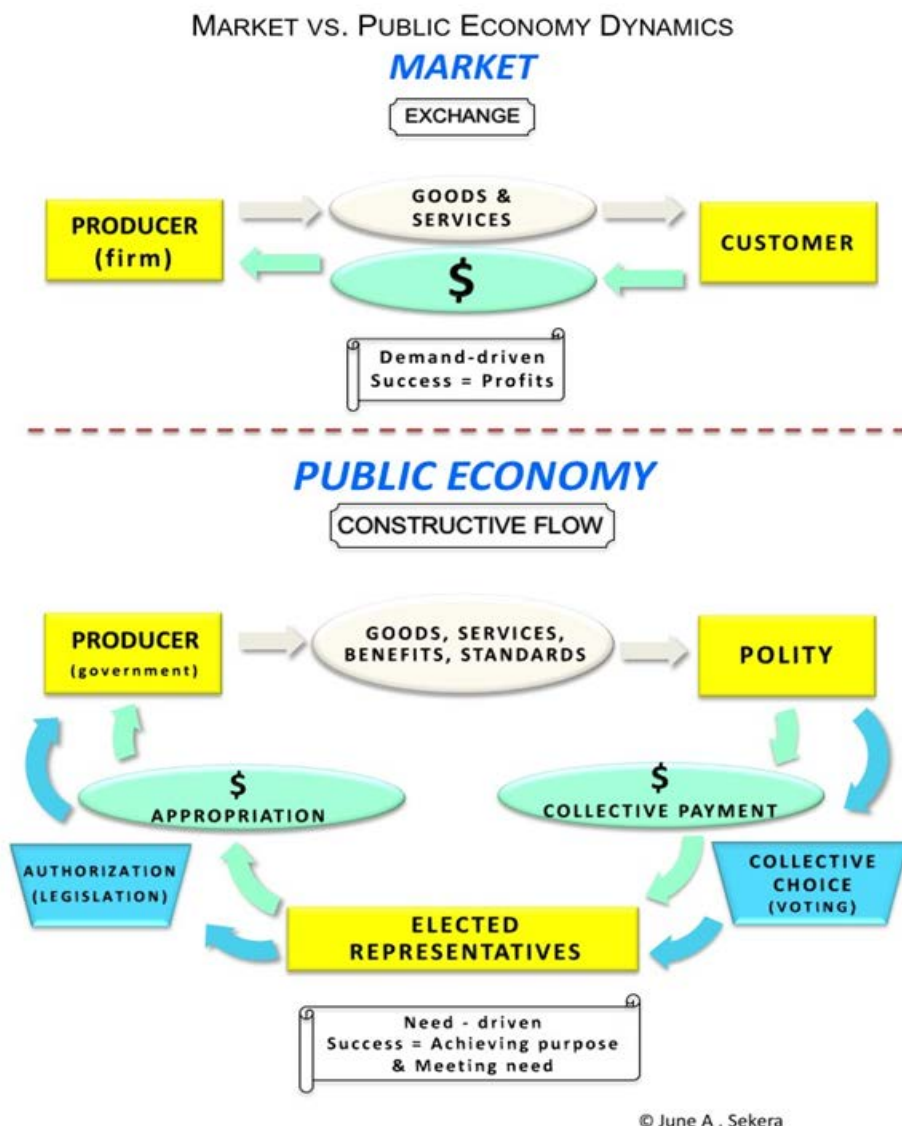
In the market, it is investors or managers who determine up front what the firm will produce based on a calculation that buyers will pay a price sufficient to cover cost and desired profit margin. In the public nonmarket, the government agency produces particular goods and services based on fulfilling a **prior public mandate**. That mandate is the basis for the proximate causes of public production: authorizing legislation and appropriating legislation.

Here I am consistent with Colm (1936) who was careful to distinguish between the instigators of public versus private production: “Among enterprises production is incited by the profit motive...In the public sector services are ordered by the responsible organs of the state or the municipalities, by the parliament, the chief executive or whoever else may have the constitutional right or factual power to decide upon public activities.”

The public sector event causation⁴³ structure can be seen in Figure 5 below, which contrasts the dynamics of the public production system with that of the market model. In the “constructive flow” of the public economy, events are contingent on the actions of agents in the previous part of the sequence.

⁴³ I am using the term “event-causation” in the sense that economist William Mitchell (2015) has used it in discussing event-causation structures in the public sector. He looks at the “causal chains through which purposes are achieved.” That is, he makes a useful connection between a chain of events and achievement of purpose. I am *not* using the term in the way that it is deployed in philosophical debates about “event causation” versus “agent causation”.

Figure 5



In mainstream economic theory, the market is a two-way transaction -- an *exchange*: a producer sells and a buyer buys. In contrast, the public non-market, as I have outlined it, is a three-node constructive flow. There is no “exchange.”

Indeed economists from the 19th century German public economics tradition held that exchange theory was not applicable to the public economy. Here is Musgrave (quoted in Sturn, 2010):

“To summarize: as an interpretation of the actual revenue-expenditure-process, the voluntary exchange theory was found unacceptable because of the unrealistic nature of the voluntary exchange assumption in general and the competitive pricing assumption in particular...” (Musgrave, 1939, p. 14).

And here is Emil Sax (again, from Sturn, 2010):

“In keeping with other scholars of German *Finanzwissenschaft*, [Sax] criticizes voluntary exchange-theories – in which the state vanishes – ...as well as positive theories that reduce the public sphere to a mere battlefield of interest groups.”

In the public economy there is no exchange. Instead, there is a *flow of actions among agents*, in which acts or outcomes are contingent upon prior acts or outcomes, ultimately relying on the polity. Public goods are created through legislation, passed by legislators whose existence is contingent upon voters. The flow of funding to the producer is contingent upon the actions of elected representatives, not upon “buyers”.

This diagrammatic rendering is a conceptual model designed to clarify the dynamics of the system design. As all models do, it simplifies. Not represented here are such exogenous factors as the influence of power elites on elected representatives, resulting in what Acemoglu and Robinson (2008) have termed “de facto political power” in contrast with “de jure political power.” Further (and problematically), recipients of public goods and services are often unaware of their source, or their own role in public goods generation. One of the virtues of this model is that it highlights the need to educate citizens regarding the connection between their choice when they vote and their receipt of goods, services and benefits.

Sources of power

Another question to be addressed when conceiving of the public economy from a systems perspective is – what are its sources of power?

Sidestepping all the sloughs of discourse on power – Marxist, Weberian, Foucauldian, and so forth – I would claim that, from a systems perspective, the sources of power in the public economy system are twofold:

- thermodynamic power, or energy; and
- societal power, or sovereignty.

Thermodynamic power

I have discussed thermodynamic power above, and will simply reiterate here that a new theory of the public economy must incorporate an understanding of energy flows and waste creation.

Sovereignty

I have argued that collective choice by the polity is one of the two chief drivers of the public economy in democratic nation-states. But behind the concept of collective choice lies the concept of sovereignty. Again, sidestepping centuries of discourse on sovereignty, I want only to argue that a concept of the “sovereign” is necessary for understanding the source of human-generated power in the public economy system. Sovereignty is “metaphysical” in Will Davies characterization of it (Davies, 2014, p. 23). “Sovereignty represents a particular form of ‘political metaphysics’, but one which makes claims about the ‘final’ source of political power, rather than the ‘final’ measure of the common good.”

Davies' definition is useful. It helps us understand that a systems theory of the public economy is not normative. Sovereign power can produce benefits to societies and it can produce social harms. Public "goods" in the sense of economic outputs is not the same thing as public "good," which is a value judgment that varies according to the judge.

The idea of sovereignty as the root source of societal power applies to *all* forms of governmental organization, not just democracies; it applies to: autocracies, oligarchies, republics, monarchies, or any other. In modern nation-states, sovereignty is the power to create, change and enforce legal obligation (Jacobson, 2011; Moore, 2014). In most countries, sovereign power is collective and intermediated (through elected legislatures and heads of state). According to *The Global State of Democracy, 2017*⁴⁴ about 68% of the world's countries, home to 62% of the world's population, are electoral democracies with "genuinely contested elections" (Jimenez, 2017). But the world's largest rising economy is not. These days, Chinese leadership has declared that it is operating according to the principles of "socialism with Chinese characteristics." China observers are not of one mind as to the meaning of this mantra. Some have viewed China as transitioning to capitalism (e.g., Coase and Wang, 2013); others see the country as doggedly Marxist-Leninist. Regardless, it is safe to say that that, if the Communist Party in China is effectively the sovereign, this "Party-State" (Xia ca., 2006) is likely not in need of a new public economics; its system is doing quite well economically. It is the democratic republics of the world that need a new theory.

Finally, appreciating sovereignty as a source of power in the public economy system is a useful bulwark to defend against the imposition of the market model on the public sector, with the resulting, inevitable, systemic malfunction and incapacitation. "State capture" might better be understood as "sovereignty" capture. Verkuil (2007) makes just that argument when he writes about the contracting out of government functions as "outsourcing sovereignty".

"Efficiency" – rejecting a typecast

Having been cast for decades in the role of an intervenor who causes deadweight loss, distortions and "inefficiency", government has been hard-pressed to demonstrate that it is not such a villain. But the type-casting has stuck. This is so despite the fact that, as Oxford economist Avner Offer (2012, p. 2) points out:

"It has never been proven that markets always provide the most efficient economic outcomes; it is not even easy to determine what such efficiency would consist of. People often make choices which are not intended to maximise their economic advantage...Those who buy and sell for their own advantage, have no incentive to seek overall efficiency, and efficiency does not just happen by itself."

For those who would demonstrate that government is not intrinsically inefficient, or at least not *more* inefficient than market actors, it has been difficult. This is especially so given that definitions of efficiency are so market-centric, Pareto's questionable⁴⁵ formulation being the gold standard.

⁴⁴ International Institute for Democracy and Electoral Assistance <https://www.idea.int/gsod/>

⁴⁵ For a marvelous dissection of Pareto efficiency, see Uwe Reinhardt, "When Value Judgments Masquerade as Science," 2010.

But challenges to the typecasting have arisen, both in terms of alternative definitions and in the form of evidence of government efficiency.

First, as to definitions, Herbert Simon in his 1997 volume *Administrative Behavior: a Decision-Making Processes in Administrative Organizations*, offered a definition of efficiency specifically for non-market (nonprofit) conditions; efficiency is defined as "that choice of alternatives which produces the largest result for the given application of resources." More recently, an economics textbook, (Goodwin et al., 2014) *Principles of Economics in Context*, defines efficiency as the condition in which "resources, or inputs, [are used in such a way] that they yield the highest possible value of output, or the production of a given output using the lowest possible value of inputs." Usefully, the latter definition could support a theory of production that incorporates biophysical realities.

Second, documented evidence of public sector efficiency is increasing and is gaining attention. Significant recent research has shown decisively that, in terms of cost and effectiveness, the market has not proved to be superior. In a meta-analysis of sophisticated comparisons of direct government provision with privatized or outsourced provision, David Hall of the University of Greenwich has found no evidence that the private sector is more efficient in terms of cost or effectiveness of results (Hall, 2014):

"It is often assumed that privatisation or public-private partnerships will result in greater levels of efficiency, just because of the involvement of the private sector. But the empirical evidence does not support the assumption that there is any systematic difference in efficiency between public and private sector companies, either in services which are subject to outsourcing, such as waste management, or in sectors privatised by sale, such as telecoms.

This does not mean that there is no difference, however. Privatised companies or contractors do charge significantly more to users of services; and transaction costs of sales, regulation, contract renegotiations, etc. are always significantly higher under privatisation. **If there is no systematic difference in efficiency, then it is always better value to use the public sector**" (emphasis added).

Hall's findings are summarized in this volume in his paper with Nguyen on "Economic Benefits of Public Services".

It is important to emphasize a form of "inefficiency" that is generally overlooked in comparing public vs private provision, i.e., that government financing costs less than private financing (Hall, 2014):

"governments can always borrow more cheaply than companies, so raising money through PPPs [public-private-partnerships] is always the worse option. This has been stated very clearly by the IMF: '... private sector borrowing generally costs more than government borrowing ... This being the case, when PPPs result in private borrowing being substituted for government borrowing, financing costs will in most cases rise ...'"

Lobina (2017) found similar results in a study of water de-privatization:

“the 2010 return to public management in Paris, France has allowed for an 8% cut in water tariffs (compared to a 260% increase in rates under private management from 1985 to 2008) and a series of interventions in favour of vulnerable consumers and the environment, with no deterioration in service quality, investment levels or the financial health of the new public enterprise.”

The Project on Government Oversight’s study of government outsourcing in the U.S. also found that, contrary to common belief, contracting out actually costs more than direct government provision. Their 2011 study showed that, on average, the U.S. federal government pays contractors at rates 1.83 times greater than federal employees’ total compensation, and more than twice the total compensation paid in the private sector for comparable services (Amey, 2012).

And a recent report by the UK National Audit Office “found little evidence that government investment in more than 700 existing public-private projects has delivered financial benefits. **The costs of privately financed projects can be 40% higher than relying solely upon government money**, auditors found” (Syal, 2018, emphasis added).

d. Results of public production

The results of public production are of two types: outputs and outcomes. Outputs are products, both tangible and intangible. Outcomes are impacts; they relate to whether a need was met, whether a purpose was achieved.

d.1 Outputs: tangible and intangible products

Production – whether market or nonmarket – produces both *tangible* goods, like cars and streets, and *intangible* services like insurance and education. But in the public sector (with its power to create and enforce legal obligation), intangibles also include products that the market cannot produce: rights and obligations.

Products of the *public economy* are “public goods.” I am not using the Samuelson definition of public goods, which is found in all textbooks but is nonetheless “useless for policy purposes” (Desai 2003). Rather, I am employing a definition consistent with my conceptual model of the public economic system; *viz* –

Public goods are created to meet a societal need:

- to supply goods or services not supplied by other means;
- to solve multifaceted or complex social, technological or economic problems;
- to make particular goods or services accessible to all regardless of ability to pay; or
- to achieve single-provider efficiencies that simultaneously ensure universal access.

I have elaborated elsewhere on the need for a new, functional definition of public goods in my “Rethinking the Definition of Public Goods” (Sekera, 2014).

The public non-market produces products that the market does not. And those that are particular to the public non-market are arguably more complex.

Figure 6 Products of the market vs the public economy systems

Market	Public Economy	
<i>Category</i>	<i>Category</i>	<i>A few examples of public products</i>
Goods	Goods	street lighting; sidewalks; roads; nautical navigation markers; clean water; parks; playgrounds; currency; GPS satellites & infrastructure; bridges; dams; canals; dikes; airports; shipping ports; etc.
Services	Services	GPS, mail delivery; weather forecasting; emergency call service; disaster response/relief; education; food safety inspections; job training programs; patent system; enterprise and socioeconomic data collection and dissemination; copyright protection and copyright enforcement; innovation through basic R&D investments; legal / judicial system; infrastructure maintenance and repair; etc.
	Economic Insurance	unemployment insurance; old age, survivors and disability insurance; pensions insurance; bank deposit insurance, etc.
	Standards	air quality standards; water quality standards; drug safety standards; product safety standards; emissions regulations; food nutritional labeling; workplace safety protections; banking regulation; food safety; etc.

With the exception of “standards,” these categories are fairly self-explanatory.

Standards: regulation and obligation

Most of the goods and services that the public economy system produces could also be produced by the market system. The decision to produce certain goods and services via the public economy system is made through collective choice (as discussed previously).

But some products can only be produced by the public economy system: those that are based on the power of the state to create legal obligation⁴⁶ and its power to enforce those obligations. Such obligations are created by law and (often) by subsequently issued “regulations,” which might better be termed “standards.”

In order to operate effectively, both physical systems and institutional production systems require regulation, and I will be sticking here with an analysis of regulation or standards from a systems perspective, rather than a Marxist or Fordist perspective (Bevir, 2010).

⁴⁶ Moore (2014) refers to this class of products as “obligations,” and he refers to those subject to such obligations as “obligatees”.

Standards and regulations are issued by both the public and private sectors, although those of the private sector do not carry the force of law. Indeed, some have argued that standards and regulation account for much of the 20th century's economic success, and the curtailment of standards may account for the reduced reliability of 21st-century systems. The Internet is a prime example. Addressing the need for standards in relation to the vulnerability of Internet sites to hacking and sabotage, Andrew Russell (author, with Lee Vinsel of "Hail the Maintainers" 2016) recounted in a 2017 interview⁴⁷ how crucial standards were to the operation of the telephone system operated by the Bell Telephone Company in the 20th century. Russell pointed out that the Bell Systems Index of Standards was 1,000 pages long – the index alone! Operating standards were a large part of the reason that the Bell Telephone system was so consistently reliable. Said Russell: "We knew that the phone would work when we picked it up." Phone customers didn't complain that there were "too many regulations."

Standards and regulation have been an essential to the success of "advanced" economies. As James Galbraith writes in his essay for this volume,

"In an advanced society, regulations cover all aspects of every production process. They set limits on the extraction of natural resources from the soil. They discipline the production process itself, with respect to safety, working conditions, carcinogens and much else. They establish standards for the quality of the product. They limit the emission of waste products... [Moreover,] all living systems – whether biological, mechanical or social – function in accord with certain immutable principles, governed by thermodynamic law. All extract resources from their environment. All process those resources, generating useful energy, put to purpose. And all release waste. But most important for the present argument, *all* biological, mechanical and social systems must regulate their use of resources. They regulate to keep energy released in the consumption of resources within the tolerances of the materials available for containing and directing that energy to useful effect."

In fact, he continues, the market itself could not operate without regulation and legal obligations:

"there are no markets without governance and government and regulations... the extent of the market depends on the reach of the state – on its capacity to provide security, a framework of law and justice, and to regulate effectively in the public interest. Without each of these, many if not most modern markets could not exist in their actual form."

It is little recognized that, as with creation of tangible outputs, the creation of standards (regulation) also entails a production system and a production process. Resources – energy, labor, talent, etc. – are input. And outputs – intangible products – result. This is akin to the inputs and process necessary to produce other intangible products in the realms of insurance or banking. The production of insurance or banking services by the private sector is viewed as a legitimate production process. Pundits and market ideologues don't seem to question the

⁴⁷ Andrew Russell interview at <https://soundcloud.com/user-573696350/dark-side-of-innovation-andy-russell>

profusion of banking and insurance skyscrapers that loom over our cities, housing huge armies of production workers. But government's creation of regulations, or standards, is scarcely viewed in the same light. It's not just that government creation of regulations is seen as harmful or distortionary to "the economy"; it's that there is no appreciation of the production process that is required to produce these intangible outputs, even by those who support such regulations or standards. Economics textbooks that note the state "power" to regulate never address that regulatory function as a process involving resource inputs and production capabilities. But, as with the production of other public goods and services, producing these standards and obligations entails collective choice, legislation, appropriation, and the capabilities (skills, talents, knowledge and technologies) for carrying out an effective production process.

The Franklin D. Roosevelt administration did explicitly recognize the need to understand government as an operating system. FDR and his Cabinet repeatedly used the metaphor of "the machinery of government" in their meetings at the highest level (Seligman and Cornwell, 1965), and the "machinery" in question had often to do with governmental apparatuses for issuing regulations and handling violations. In an era when the state had to rescue a falling and failing national economy, public sector leaders dealing with a national economic crisis knew that they had to attend to the proper functioning of this "machinery" in order for their rescue effort to work. Regulation wasn't a "deadweight" on the market economy; New Deal standards and obligations were critical to its survival.

d.2 Outcomes

The intended outcome of market production, at its most basic level, is profit. Without profits the agent of the market system – the firm – cannot survive (unless, of course, it receives subsidies from an outside source). In the market, measuring outcomes is simply a calculus of profitability. And there is only one constituency to satisfy: customers.⁴⁸

The intended outcome of public economy production relates back to purpose. A good or service is produced to meet some identified need, which has been specified or at least implied, in the authorizing legislation that makes production possible.

And there is even more complexity. In the public non-market, there are multiple constituencies to satisfy: (1) the recipients of the goods or services; (2) the elected representatives who appropriate the funding; and (3) the public (voters and taxpayers). Additionally, (4) the legislated purpose must be met. Finally, beyond immediate outcomes, long-term impacts (intended positive externalities) ought ideally to be measured.

Measuring results in the public domain is therefore a tall order.

5. Measuring results and messaging what matters

For the past three decades, public administration practice has been suffused with the prescriptions of the ruling economic orthodoxy and constrained by the inapt imposition of private sector practices. Public sector performance measurement regimes have been

⁴⁸ Of course, investors must be satisfied with their return on investment, but that is a completely different point than the reality that if buyers are not satisfied with the products or services that are produced, revenues will cease (except in conditions of monopoly or near-monopoly).

designed within this confining and inappropriate context. (This has been true particularly in Anglo-Saxon countries – UK, US, NZ, Australia – but continues to spread across the planet.) New mandates simply build on existing performance measurement practices, which are manifestly inadequate to the complexity of publicly-funded nonmarket systems. Constrained by assumptions of neoclassical and public choice economics and corporate business practices, they fail to take into account the uncommon complexity of the public production process.

An entire industry dedicated to government performance measurement has spawned a vast literature on measuring results. Public servants and educators are regularly bombarded by corporate salesforces expounding the virtues of their proprietary systems for measuring outcomes. Some of the key problems in measurement schemes have been identified, others are barely recognized. (For a brief exposition on the situation in higher education, see “The Misguided Drive to Measure ‘Learning Outcomes’” Worthen, 2018).

This for-profit industry thrives on the notion that results can be measured in the public sector as in the private sector. It thrives therefore on lucrative contracts from all levels of government. The advent of “Big Data” has been wind in the already-unfurled sails of this multi-billion dollar, fabulously lucrative, enormously influential industry. Responding to continual pressure from its salesforces, and in lockstep with ideological preferences, legislators mandate performance management systems without regard to their failures past and present.

The difficulties of measuring the outcomes of public nonmarket production may not be insuperable, but they are so fiendish that to treat them with the respect they deserve, I would be obliged to compose an entirely separate essay. I can do no more here than alert readers to a few of the most salient issues.

Measurement mania

Before diving into a fiery lake of metrics, I should note that there has been stout resistance from some quarters to the very notion of measuring results in the public domain. Diefenbach (2009), for example, has argued that “This ‘measure mania’ brings far-reaching negative consequences to public sector organizations, the people who work in them and the services that are being provided.” He has a point, given the inapt market-centric postulates and inept and inapt methods embedded in most public performance measurement programs. But the push for performance measurement in the public sector is widespread and accelerating, so we would do better to construct a meaningful method of measurement than to simply bristle at any mention of metrics.

Criticisms of the current situation are numerous (Levartu, 2016; Moynihan, 2008; 2014; Frederickson and Frederickson, 2006; Brady, 2016; Pollitt, 2013; Radin, 2011; Metzenbaum, 2014). Critics charge that public sector performance measurement systems have:

- “Penalized and disrupted service to the poor”
- “Insulted the intelligence of America’s teachers”
- “Sapped the energy and depressed the morale” of the public workforce
- Distorted public purpose, values and norms
- Poisoned the atmosphere for serious efforts to assess results and improve outcomes.

Yet, these sorts of critiques are coming only from a small subset of scholars and observers. Politically, rhetorically, intellectually, today's challenges to public performance measurement methods are *insufficient* and undertheorized. Political leaders and pundits all-too-commonly accept the contention that we need a business-like measurement of performance in the public sector, either because they march under the pennant that government ought to be run like a business, and/or because they have bought into the creed that government is invariably inefficient and government workers invariably self-seeking.

So there are multiple issues to resolve under the rubric of measurement. Among them: why should performance be measured? What metrics would be most useful? How can we appropriately and astutely measure results specifically in non-market systems?

Measuring for the wrong reasons

The reasons for measuring the results of public production are fourfold:

- 1) to determine whether an intended need has been met or purpose achieved;
- 2) to improve results;
- 3) to inform elected representatives, who make ongoing decisions about authorization and funding; and
- 4) to inform the public, who are both the recipients of public production and the originating source.

These are frequently *not* the reasons that programs of measurement are imposed. More often the reasons are:

- Punishment: reputation and rankings (Muller, 2018)
- A culture of compliance (Metzenbaum & Shea, 2018)
- An ideological motivation (Worthen, 2018; Caiden & Caiden, ca. 2000)

“Measuring the unmeasurable”⁴⁹

A significant aspect of production in the public economy is providing protection. How do you measure the results of work whose success lies in forefending harm? For example, how do you measure the achievement of harms that did not happen:

- epidemics that don't arise or spread;
- food poisonings avoided;
- plane crashes that don't occur (each day there are 60,000 safe plane landings in the US alone);
- car crash injuries that don't occur;
- savings that are not lost because bank accounts have been publicly insured.

And so on. Current measurement regimes do not even pretend to deal with such questions.

Complexity – an obstacle of measuring results in the public nonmarket economy

⁴⁹ I borrow this term from *Key Indicators in Canada* (Warren, 2005), which touches on some, but not all, of the problems I identify.

I will briefly list a few more of the complexities, most unaddressed, by present-day public sector performance measurement systems.

a. Difficulty of defining outcomes

Most scholars of public performance measurement have not dealt with, or even mentioned, the complexity and difficulty of defining outcomes. A few who do are Radin (2012); Moynihan (2008); Pollitt (2000); Pollitt, Bouckaert & van Dooren (2009). The fundamental need to tackle this problem has been overlooked or minimized in most of the literature on and practice of public sector performance measurement. In many cases, the purpose of public production is to create “positive externalities,” sometimes immediate, sometimes long-term.⁵⁰ This aspect has been unaddressed in public sector performance measurement schemes.

b. The multiplicity of types of public goods that are produced:

Metrics and measurement schemes basically ignore the diverse categories and multiplicity of products the public domain produces:

- (1) goods (tangible products)
- (2) services and protections
- (3) economic insurance (old age and disability insurance; workers' compensation; etc.)
- (4) standards (regulations and operating rules)
- (5) innovations (Internet; GPS; medical devices; medications; etc.)

c. The multiple ways the public sector produces value:

- Product / service provision (directly by civil servants or indirectly via privatization / outsourcing).
- Regulation
-

d. Invisibility is a hallmark of effectiveness

Since public goods and services are created to meet the unmet needs of a society or to solve complex social or economic problems, once the needs are met or problems solved, they “vanish.” Invisibility is a hallmark of effectiveness in the public economy system. Even when public goods, services and processes are not invisible, they may be opaque: that is, taxpayers cannot easily or directly see what they have paid for.

e. The complexity of how the public sector finances production

As outlined above, there are basically two ways the public sector “finances” production:⁵¹ expenditures and tax expenditures.

(1) Expenditure (including “investment”) for products, services, protections, standards and innovations (schools, roads, innovations like GPS, health and science innovation grants,

⁵⁰ Weisbrod (1964) in an analysis of the long-term impacts of public education, makes the point that “when goods and services have significant external effects the private market is inadequate”.

⁵¹ As noted earlier, I am not addressing Modern Monetary Theory and the idea that money creation precedes taxation. Doing so is not necessary for the argument here.

social security, environmental regulation and enforcement, food and drug safety regulation and enforcement, and scores more).

(2) Tax expenditure (tax credits, deductions, exemptions, exclusions, etc.). Public policy is often accomplished via tax expenditures rather than through spending/investment. A few US examples: mortgage interest deduction; the Earned Income Tax Credit; renewable energy tax credits.

Tax expenditures in the US are enormous. Here are numbers from 2015, for example:

“On the basis of estimates prepared by the staff of the Joint Committee on Taxation (JCT), CBO expects that those and other tax expenditures will total about \$1.5 trillion in 2015 – an amount **equal** to 8.1 percent of GDP, or equivalent to nearly half of the revenues projected for the year.”⁵²

There has been virtually no attempt to measure the results of tax expenditures or whether they are achieving their intended purposes. In the United States, the Government Accountability Office (GAO) has repeatedly called attention to this failure to assess the impacts of governing by tax expenditure.

In 2013, for example, GAO basically said it could not evaluate whether tax expenditure programs were achieving their purposes:

“With so much spending going through the tax code in the form of tax expenditures, the need to determine whether this spending is achieving its purpose becomes more pressing. This report identifies gaps in the data required to evaluate tax expenditures but makes no recommendations on how to fill these gaps. A key step in collecting the data is first determining who should undertake this task. ... However, these agencies have not yet been identified. GPRAMA may make a start on answering the question of who should evaluate tax expenditures by requiring that the responsible agencies identify the various program activities that contribute to their goals, which we believe should include tax expenditures” (GAO, April 2013, “Tax Expenditures”).

f. Non-use of results

Enormous and costly efforts have been made for decades to measure performance at all levels of government. In the United States, massive programs have been enacted by Congress and imposed across domestic agencies (excluding the Department of Defense, intelligence services, and tax expenditure programs).⁵³ These attempts to impose market-like “accountability” regimens on the public nonmarket have not delivered on their promises. Studies have found that the results of these measurement systems have been used neither by Congress when making funding decisions nor by government managers. (Moynihan &

⁵² An Update to the Budget and Economic Outlook 2015–2025; CBO, August, 2015

⁵³ In the United States, at the federal level, two massive government-wide programs were created – the Government Results and Accountability Act of 1993, enacted concurrently with the Reinventing Government initiative of the Clinton administration, and the Program Assessment Rating Tool (PART), created in 2002 by the Bush administration. Then GPRA was amended by the GPRA Modernization Act (GPRAMA) of January 2010, signed by President Obama in January 2011.

Lavertu, 2012; Government Accountability Office, 2014; Radin, 2011; Radin, 2012 p. 159; Metzenbaum, 2013; Metzenbaum, 2014; Frederickson & Frederickson, 2006).

This is hardly to say that performance measurement in the public domain cannot work. It can (as has been demonstrated in limited cases), and some believe it must.⁵⁴ But approaching performance measurement from the perspective of “accountability” on the one hand, while mimicking the ways and means of the private sector on the other, is not the way to go about it.

What’s needed

The persisting inability to measure and communicate the results of government production of goods and services underscores the need for a comprehensive rethinking of how to measure results in the public domain. I will list, but do not have space in this essay to discuss, actions that are needed.

- Adapt complexity theory.
- Construct a connection to legislative purpose.
- Write simpler, goal-oriented laws.
- Deal with the difficulties of goal definition.
- Re-think risk adjustment.
- Distinguish between process and products; outputs and outcomes.
- Re-think impact evaluation.
- Tackle tax expenditures.
- Measure positive externalities (short, medium and long-term).
- Integrate concepts from the Public Service Motivation (Moynihan & Soss 2014).
- End the “accountability” attitude.
- Call a moratorium on “pay for performance.”
- Articulate with macro measurement efforts.
- Message what matters.

Messaging what matters

As I stated above, one of the four reasons for measuring results of the public production system is to inform the polity. This may seem so obvious as to merit no further discussion. As Hochschild (2010) notes:

“Almost every democratic theorist or democratic political actor sees an informed electorate as essential to good democratic practice. Citizens need to know who or what they are choosing and why – hence urgent calls for expansive and publicly funded education, and rights to free speech, assembly, press, and movement.”

⁵⁴ Jerry Ellig et. al. *Government Performance and Results: An Evaluation of GPRA's First Decade* (ASPA Series in Public Administration and Public Policy); Sep. 8, 2011.

But once we consider the informed citizen from a systems perspective, we must think of the choosing individual⁵⁵ as the fulcrum – the point or lever--upon which the operation of the whole system depends, *if* this system is to operate effectively.

As Hudson and Sommers (2013) remind us, voters must be sufficiently informed to understand the consequences of their actions within this system. However, due to characteristics of the collective choice systemic driver, the choosing individual may make uninformed choices or the majority of choosing individuals may be co-opted by a minority with wealth, power or other advantages (Acemoglu and Robinson, 2008; Page et al., 2013).

Is the public choice school right? Is collective choice simply a “problem”?

As I have noted, Buchanan did get to the nub of the issue when he began the work that eventuated in the public choice school:

“Individual participation in collective decision-making has not been thoroughly analyzed, and the means through which the separate private choices are combined to produce ‘social’ or ‘collective’ outcomes have not been subject to careful and critical research.”

But the analysis and conclusions to which the public choice school has clung is destructive to the system it purports to analyze. Perhaps intentionally casting the process of collective choice as pathological (Stretton and Orchard, 1994), they propose to substitute a supposedly incorruptible market system for a supposedly corrupt system of collective choice. If your vote can be bought, you should vote by buying.

The creed of the public choice school is not the solution to the problem. It *is* the problem. If today’s democratic nation-states are to function effectively for their polities, one of the elements to attend to is how to effectively and accurately message what matters.

What voters must come to understand is that the public economic system is a major producer in all democratic states; that the market system cannot and will not provide what the public economy provides; that the public system of production is ordinarily more efficient and responsive than those for-profit entities to which government services have been contracted out; that the market system itself depends for its health and vitality on the standards, regulations, and infrastructure maintained by government through the public economy; and that it makes no sense to measure the performance and achievements of the public economic system as if it were a for-profit business.

Such messaging will need to overcome years of misinformation and willful misconstrual of the role of government and the purposes of the public economy. As Baekgaard and Serritzlew (2016) at Aarhus University concluded from their research:

“Citizens’ interpretations of performance information are systematically biased and depend on their prior beliefs...*Policy makers should bear in mind that performance information is likely to be systematically misinterpreted by*

⁵⁵ “The choosing individual” is a term used in philosophy, political science, ethics and genetics and favored these days by some conservative pundits. But it does not seem to have been much integrated into systems theory, nor portrayed as a fulcrum in collective choice theory.

citizens, limiting the payoff from providing citizens with performance information” (emphasis added).

A more useful, and immediately feasible, approach than reporting outcomes metrics would be to reform the vocabulary used to talk about the public sector, which has been devalued *through rhetoric, not through any demonstration of fact.*

There is much conversation now about “public value”, a school of thought within the field of public administration scholarship which is based on the assumption that the public sector must prove its value in a way that is analogous to the way that businesses prove their value. (Moore, 2014; O’Flynn, 2007; Williams & Shearer, 2011). This entangles public value theory, as it has unfolded thus far, in the market model – its idiom and perspective (Dahl and Soss, 2014) – which does not offer a framework for explaining the unique way in which the public economy system actually does create value.

The public economy system produces a cornucopia of things that people want and value; the messaging about them needs to be tied to an encompassing concept of the system itself and individual citizens’ role in producing them. Once again, a great deal of ink has been spilled on vocabulary and messaging, but these attempts (heretofore mostly unsuccessful) have been launched in the absence of any coherent concept of the public sector production system that produces the myriad goods, services, protections and benefits that citizens receive and use daily.

6. Conclusion

Many recognize that the policies and rhetoric of neoclassical economics are devastating many democracies, but few are working actively to formulate an alternative economic framework for understanding the public economy.

Ideas and concepts matter. Ideas frame theory; theory shapes concepts, and “Concepts,” writes economist Meghnad Desai (2003), “influence how the world is viewed. They shape human expectations and actions.” So does our phrasing of those ideas and concepts: Richard Musgrave observed in the 1960s that “Semantics, as the history of economic thought so well shows, is not a trivial matter” (Desmarais-Tremblay, 2013, p. 5).

A number of heterodox economists have been advocating an overhaul of the pedagogy of economics to reverse much of the damage done by a market-driven system of values. Victoria Chick of University College London, for example has been advocating for such an overhaul.

“[O]ver the past few decades [a narrow, market-centric] economics has colonised not only much academic inquiry in the social sciences, but also public debate as a whole. Most notably, it has colonised politics. By giving ‘scientific’ support to programmes of deregulation and privatisation over the past 40 years, it has managed to transform our economic structures to conform to its ideal of free markets...” (Chick, 2011).

A cogent and catalyzing concept of public economics is now called for. In her paper on the new economy, Neva Goodwin (2014b, p. 8) speaks of the urgent need to reconnect economic theory with the real world:

“the relationship between theory and reality is dramatically overdue to be realigned. In the 20th century, economic theory, regardless of its realism, was allowed to direct policies – some self-fulfilling, and some disastrously different from the announced intentions. We must move to a theory that is not only based on observed reality, but that also gives attention to what kind of economy is necessary, possible, and desirable.”

Here is where we might start:

a. Name the public economy

With few exceptions (e.g., Goodwin et al., 2014) a “public economy” is neither mentioned nor recognized in the teaching of economics. It is not named. Even in the most recent online edition of the authoritative Oxford English Dictionary, the term has no entry or subentry of its own.⁵⁶

As Betty Friedan showed in her path-breaking 1950s discussion of women’s plight as “the problem that has no name,” women needed words to name their predicament before they could understand it and act to fix it. The solution, then, must begin with making clear, evident and popular the language that will enable people to recognize public goods and the public economy (Derber & Sekera, 2014).

b. Map the public economy

Of course, as we bring it into the limelight, the public economy must be defined. Part of that definition must entail qualifiers of the scope and size of the public economy.

I began this paper by stating that the public economic system is a “major” contributor to all economic activity. But there is no agreement about its size.

Its sphere and scope are undoubtedly larger than generally acknowledged, although it is regularly claimed that the market has a larger scope. For example Robert Johnson, President of the Institute for New Economic Thinking (INET) said in his remarks last year on the launch of INET’s new, independent “Commission on Global Economic Transformation”,

“the existing paradigm can’t meet the challenges we face. That paradigm romanticizes unfettered markets while it overestimates the capacity of national governments to address human problems—at a time when the domain of the sovereign is smaller than the scope of the market” (emphasis added, Institute for New Economic Thinking, 2017).

⁵⁶ But there are two usage references in the OED, one of which notes that “Dispute centers... about how large this role may become before the public economy metastasizes and swallows up the private economy.”

Such assertions are common, but their accuracy questionable.⁵⁷ Calculations of GDP undervalue government's contribution; moreover, GDP is based on inputs because no one has determined how to value government outputs or outcomes. Also, GDP counts "government social benefits to persons" (commonly called transfer payments) in the category of private economic activity (as part of personal consumption expenditures), rather than as government activity. The GDP methodology (in the US at least) also places certain public agencies, like the Postal Service, local transit agencies, public water and sewage agencies, airports, water ports and other "government enterprises," in the "business sector" category. In the National Income and Products Accounts, "the value added by government enterprises (as producers of goods and services for the marketplace) is recorded in the business sector, along with that of private businesses" (Bureau of Economic Analysis, 2017, p. 9-3). The Bureau of Economic Analysis recognizes and acknowledges some of the deficiencies (Bureau of Economic Analysis, 2017, p. 9-4).

Research is needed to identify the extent of mis-categorization and undervaluation.

c. Develop and advance a new public economics:

- Use a systems approach;
- Recognize government as a producer;
- Reclaim and restore elements of the "original" public economics; and
- Incorporate the biophysical imperatives of production.

Contemporary economics teaching fails to address, let alone explain, the dynamics and drivers of non-market systems. That void seriously imperils the ability of the public economy to function on behalf of the populace as a whole. In the absence of an understanding of the systemic forces and requirements of production in the public domain, purveyors of the notion of market superiority and private interests can together maneuver the machinery of government to benefit from the diversion of public financing to private gain. Privatization, outsourcing, marketization and monetization of public systems, assets and services channel taxpayers' collective financing into activity that guarantees private profits but often abandons public purpose. The public nonmarket has been devalued, dismantled and de-funded. And today's economics lacks an explanatory model of how goods and services originate through this collective-choice and shared-cost system.

This paper proposes a new theory of the public economy based on a restoration of extinguished but crucial historical analyses and on empirical evidence relevant to today's real-world practice. I argue for a systems approach. Such a perspective facilitates the development of a theory of government as a producer, following the concepts of Studenski. A systems architecture also facilitates incorporation of the biophysical realities of production – a factor long, and dangerously, neglected in mainstream economics, but certainly essential as we look forward. A "new" theory can also reach back to the "original" public economics of the 19th and early 20th century, and build on aspects of that discipline. In particular, Gerhard Colm's reasoning can be a source of pivotal insights. To begin with, we can look to his two guiding principles:

⁵⁷ For an insightful analysis and data, see Hall and Nguyen in this volume: "Economic Benefits of Public Services."

“the public sector should be dealt with as an *essentially economic* phenomenon, not as an extra-economic appendix to the market economy; and the state as the core of a modern public sector is an economic system with its *own* economic logic – it is an *essentially* non-market type of economic system whose proper analysis must neither explicitly nor implicitly be based on market price-theoretic reasoning” (emphases in original, Sturn, 2010).

We can also build on Colm’s concepts, and those of other contributors to the German Public Economics discipline, concerning public purpose, collective choice, and other attributes distinctive to the public economy – incorporating perspectives that were developed and discussed over a century ago, but that were expunged when rational choice theory ascended. Re-invigorating long-submerged perspectives could contribute to a useful blueprint and sturdy platform on which to build a new public economics.

As Sturn (2010) summarizes in his essay on the German Public Economics discipline:

“Colm’s system-theoretic foundations trigger a different research agenda: how to develop the mechanisms of the state economy according to the system-specific logic of an economy not oriented towards market demand, but towards various kinds of politically defined public goals?”

Proviso and presage

In a recent essay, “Is Neoliberalism Still Going According to Plan?” British political economist William Davies (2017) suggests that a caveat may be needed with regard to analyses such as those by Philip Mirowski in “Hell is Truth Seen Too Late.” Davies speculates on whether the hellish pathology that has “thoroughly undermined American democracy” may be a peculiarly *American* pathology.

My pages might also be taken as peculiarly American. Certainly, few democratic nation-states are as distempered as the United States at present, and simultaneously as blinkered with regard to the public economy. But Davies goes on to say, “On the other hand, the global reach and ambitions of Silicon Valley do mean that nowhere is entirely safe from this any longer.”

It is not just the values and presumption(s) of Silicon Valley that are infecting the world. Other US-hatched creeds and practices are proving highly contagious. The British universities, Oxford and Cambridge included, writes Simon Head (2011),

“are under siege from a system of state control that is undermining the one thing upon which their worldwide reputation depends: the caliber of their scholarship. The theories and practices that are driving this assault are mostly American in origin, conceived in American business schools and management consulting firms.”

So, although the “deconstruction of the administrative state” and the privatization and profitization of government may be proceeding at a particularly accelerated pace now in the United States, other democratic nation-states are under similar, if less virulent, assault.

Many progressive activists, pundits and political leaders, and heterodox economists as well, are calling for a replacement of capitalism with something else. That's all well and possibly good. But, in the meantime we still have democratic nation-states whose public economic systems are vital producers of the goods and services that "maintain civilization as we know it."⁵⁸ We had best learn how to understand, repair and operate these public economies so that they may continue doing just that.

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⁵⁸ New York state government worker, quoted by Elissa McBride in a webinar on "Essential Services, Essential People: The Value of a Professional Government Workforce," Center for American Progress, October 18, 2017.

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Economic benefits of public services

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Abstract

The article reviews the extensive global empirical evidence on the relative efficiency of the private versus public sectors. The evidence does not support the view that there is any systematic difference in efficiency between public and private sector companies, either in services which are subject to outsourcing, such as waste management, or in sectors privatised by sale, such as telecoms. If the private sector does not have this efficiency advantage, then there is nothing to offset the higher private cost of capital, and it is always likely to be better value to use the public sector.

At the macro level, far from being a burden on the economy, growth in public spending as a proportion of the economy has had a persistent positive link with GDP growth for more than a century, in developing countries as well as high income countries. The mechanisms linking public spending and economic growth include investment in, and maintenance of, infrastructure, supporting an educated and healthy workforce, redistributing income to increase the spending power of poorer consumers, providing insurance against risks, direct support for industry - including through technological innovation - and increasing efficiency by taking on these functions. This public sector activity, directly and indirectly, supports half the formal jobs in the world, and has a comparative advantage in delivering public goods such as universal access to healthcare, affordable housing, and protecting the planet from climate change.

The need for public services and public spending is expected to grow globally due to continuing economic development, climate change and ageing populations, but, as in the past, this depends on the outcome of political processes.

Acronyms/Glossary

ECB	European Central Bank
EU	European Union
FT	Financial Times
GDP	Gross domestic product
ILO	International Labour Organisation
IMF	International Monetary Fund
LLW	London Living Wage
OECD	Organisation for Economic Cooperation and Development
PSIRU	Public Services International Research Unit
UNCTAD	United Nations Commission on Trade and Development
USD	USA dollars
WB	World Bank
WEO	World Economic Outlook

1. Introduction

Empirical evidence does not support widespread political assumptions or mainstream economic theorising about the public sector, neither at micro nor macro level. Rather, the evidence shows that at micro level, public sector organisations are not intrinsically less operationally efficient than private companies; and that at macro level, a continuously rising

share of public spending in the economy has not stifled economies, but has been associated with economic growth and delivery of public goods for well over a century.

The first section reviews the empirical evidence about the relative efficiency of the private versus public sectors. This does not support the view that there is any systematic difference in efficiency between public and private sector companies, either in services which are subject to outsourcing, such as waste management, or in sectors privatised by sale, such as telecoms. There is now extensive experience of all forms of privatization, and many studies, surveys, overviews and meta-reviews, whose results repeatedly find no evidence that the private sector is intrinsically more efficient. This picture is further confirmed by examination of nine sectors which are most often subject to privatisation, outsourcing and PPPs – buses, electricity, healthcare, ports, prisons, rail, telecoms, waste management and water – and the same results hold true in each sector: the evidence does not show any superior efficiency by private companies.

If the private sector does not have this efficiency advantage, then there is nothing to offset the higher private cost of capital. Governments can always borrow more cheaply than companies, so raising money through privatisation, outsourcing or PPPs [public-private-partnerships] is always the worse option. This has been stated very clearly by the IMF: “private sector borrowing generally costs more than government borrowing ... This being the case, when PPPs result in private borrowing being substituted for government borrowing, financing costs will in most cases rise...” Additionally, transaction costs of sales, regulation, contract renegotiations, etc. are significantly higher under privatisation. If there is no systematic efficiency advantage for using private companies, then it is always likely to be better value to use the public sector.

The next section examines the relationship between public spending and the general economy, in terms of growth, employment and public goods. Far from being a burden on the economy, growth in public spending as a proportion of the economy has had a persistent positive link with GDP growth for more than a century. The evidence for this positive link is visible in developing countries as well as high income countries. The mechanisms linking public spending and economic growth include investment in infrastructure, supporting an educated and healthy workforce, redistributing income to increase the spending power of poorer consumers, providing insurance against risks, direct support for industry – including through technological innovation - and increasing efficiency by taking on these functions.

The public economy supports employment, in both high income and developing countries, through direct employment of public service workers; indirect employment of workers by contractors supplying outsourced goods and services; employment of workers on infrastructure projects; the extra demand from the spending of the wages of these workers and also of recipients of social security benefits (the “multiplier effect”). The combined effect of these mechanisms is to support half the formal jobs in the world. Additionally, public subsidies have supported employment by private companies through recessions, or by providing employment guarantees. The public sector also supports the quality of employment by providing formal direct jobs with decent pay and conditions; using procurement rules to require “fair wages” from private contractors, to reduce gender and ethnic discrimination, and to strengthen formal employment of local workers. Public services also improve equality, because public sector provision reduces the extraction of profit, because public employment has less differential between highest and lowest, and because the value of public services themselves adds most to the effective income of poorer households.

The purpose of public spending and public services is to achieve public objectives, such as ensuring universal access to healthcare, affordable housing, and protecting the planet by the reduction of greenhouse gas emissions.

The article concludes on the political economy of public services. The decisions which drive the development of public services and public spending, or the imposition of austerity, are the outcome of political processes at national and international levels.

2. Efficiency

2.1. The importance of the question of comparative efficiency

It is widely assumed that privatisation or PPPs will result in greater levels of technical efficiency. That is, the private sector can always deliver a given level of service with less input costs than the public sector. Politicians, media, academics and consultants frequently refer to “private sector efficiency”. This assumption is often shared even by critics of privatisation.

It is supported by mainstream economic frameworks, including agency theory and public choice theory. Public choice theory proposes that government employees, in contrast to private entrepreneurs, do not seek profit maximization, but exploit public firms to attain political goals such as limiting unemployment, or self-interested advancement within the bureaucracy by maximising budgets, or delivering favours to pressure groups, all at the expense of efficiency (Niskanen, 1975; Buchanan and Tollinson, 1984; Rowley et al., 2013). Under agency theory, the demands by shareholders for returns will force managers to pursue policies which maximise the firm’s market value, whereas in the public sector these incentives are absent (Alchian and Demsetz, 1972; 1973).

This expectation of enhanced efficiency is crucial for the claim that general welfare is improved by privatisation and use of the private sector even for the delivery of public services. If the private sector does not have this efficiency advantage, then there can be no general case for any form of privatisation. This is because, from the perspective of the public interest, privatisations, outsourcing and PPPs are at a clear disadvantage in relation to most other economic criteria. The biggest single disadvantage is that the cost of investment finance is nearly always significantly more expensive with private operators, because of the higher cost of capital, due to the premium return on shareholder equity through dividends, and higher interest rates attached to private sector borrowing because of lower credit ratings. Unless the private sector can deliver real substantial savings from efficiency, then it is systematically likely to be worse value for the public. From the investors’ point of view, of course, the opposite is true: the higher returns on capital are the desired objective.

This has been stated very clearly by the IMF, in a 2004 policy paper which is concerned with PPPs, but the argument applies in the same way to outsourcing and privatisation by sale, and so these terms have been added to the following quote:

“when [outsourcing, privatisation or] PPPs result in private borrowing being substituted for government borrowing, financing costs will in most cases rise. Then the key issue is whether [outsourcing, privatisation or] PPPs result in efficiency gains that more than offset higher private sector borrowing costs... much of the case for [outsourcing, privatisation or] PPPs rests on the relative

efficiency of the private sector. While there is an extensive literature on this subject, the theory is ambiguous and the empirical evidence is mixed... It cannot be taken for granted that [outsourcing, privatisation or] PPPs are more efficient than public investment and government supply of services..." (IMF, 2004).

The general case is crucial for public policy decisions, because in practice, comparisons between public and private sector alternatives are rarely made. In the great majority of cases, private companies only compete for outsourced contracts against other private companies; and a privatisation by sale goes, by definition, to a private buyer. The more basic decision is the choice between public and any form of tendering or privatisation, which has to draw on the general evidence.

But these assumptions and theories are subject to the brutal test of empirical evidence. There is now extensive experience of all forms of privatisation, and researchers have published many studies of the empirical evidence on comparative technical efficiency. And the results are remarkably consistent across all sectors and all forms of privatisation and outsourcing: the empirical evidence does not show that the private sector is systematically more efficient than the public sector.

2.2. Effectiveness, efficiency and definitions

This does not mean the private sector can deliver public services just as well as the public sector. Privatised companies or contractors charge significantly more to users of services; and transaction costs of sales, regulation, contract renegotiations, etc., are always significantly higher under privatisation. The more fundamental question is whether systems using private companies can deliver public services as *effectively* as public sector systems. Public and private provision must be compared for their effectiveness in delivering these public goods, not just their cost-efficiency. It cannot be assessed through the results of individual companies, because it concerns the social and environmental and economic effects of the system as a whole. Efficiency is not the same as cutting costs. Lower costs may simply mean lower quality of service; or they may mean that the company is taking its profits by cutting the jobs, pay and conditions of its workers, without improving systems of work. This does not increase efficiency, it just redistributes income to the company at the expense of others. Assessing even technical efficiency requires considering results as well as inputs (Stone, 2013). It requires much better ways of assessing the quality of these effects, and more democratic processes for doing so: a review of healthcare efficiency measures, for example, found that very few made any attempt to consider quality of care (Lethbridge, 2012). Lower operating costs may also conceal real additional costs for the public, which do not show up in analyses of the company costs alone. The public sector carries the extra 'transaction costs' of sales, tendering, monitoring and regulation; a low cost tender may be used to win a contract, but the contractor then renegotiates the price upwards – or the quality downwards – to become more profitable.

Most of the evidence discussed below does not cover the assessment of effectiveness – it is restricted to technical efficiency. The studies and reviews discussed here use a range of methodologies and definitions of technical efficiency. These different methods include measuring labour productivity, defined in terms of value added per employee, or 'total factor productivity', which also attempts to measure the efficient use of capital investments. Some use company profitability as a measure of efficiency, despite the fact that this can be at the

expense of higher prices to users or worse pay for workers. Some use measures specific to the sector: for example, the weight of refuse collected per employee, the number telephone connections per employee, or more general measures such as the percentage of the population with water and sewerage connections. These variations in definition are clearly very important for attempts to assess the effectiveness and efficiency of actual public services. But the comparative studies discussed in the following sections find similar results whatever definition they use. Moreover, many of these studies have been carried out by economists expecting to confirm a theoretical argument that privatisation is intrinsically more efficient, which makes the results more striking.

Many of these factors arise from the difference in objectives between private companies and the public sector. For the private company, the delivery of a public service or a public good is an externality; for the public sector, these results are its *raison d'être*. This does not need to mean that all acts and objectives of a private operator are always in conflict with public policy objectives and public goods, but the existence of two autonomous sets of objectives creates the permanent possibility of such conflicts arising in relation to general policy, operational policies such as staffing levels and training, and daily management decisions.

This conflict is presented as a central feature of Megginson's theoretical position on the advantages of privatisation (D'Souza and Megginson, 2007). Reducing the importance of the public policy objectives, and increasing the role of the firm's commercial objectives, is identified as the key aspect of privatisation which enables the firm to become more efficient: "state-owned enterprises have multiple objectives, some of which are inconsistent with the maximization of financial and operating efficiency. The ownership changes from privatization should help to redefine the firm's objectives and the manager's incentives." As a result of downgrading the non-commercial objectives, the managers can find "greater entrepreneurial opportunities", which can be seized through "restructuring of the newly privatized firms" (ibid.). So on Megginson's view, efficiency gains by the private sector actually *depend on* downgrading public service objectives where they hinder profit-maximisation – they are intrinsically *opportunistic gains at the expense of public interest objectives*.

2.3. The evidence: overall reviews

The major reviews of international literature and experience, covering a number of different sectors and service, now generally reach the conclusion that there is no significant intrinsic efficiency difference between public and private organisations. This is in sharp contrast to the review by Megginson and Netter (2001), which has been far the most cited on this issue (over 3000 citations according to Google scholar), despite the fact that it considered a much smaller set of studies than most of the others, and used data from a very diverse range of sectors, from which the authors concluded that, "Taken as a whole, the academic evidence now strongly favors private over public ownership of business enterprise on both efficiency and profitability grounds". Major flaws in this article are now apparent.

The most recent meta-review of empirical studies comparing the efficiency of public and privatised companies (Mühlenkamp, 2015, firmly concludes that: "research does not support the conclusion that privately owned firms are more efficient than otherwise comparable state-owned firms." He uses extremely strong language about Megginson and Netter, stating that: "The evidence indicates that these authors' conclusions were biased in favour of privatization despite the evidence indicating that the true picture is much more differentiated." He is savagely critical of the arbitrariness and selectivity of their material: "they initially consider 10

very heterogeneous and arbitrarily selected publications...one of [which] compares government financed and privately funded expeditions to the Arctic from 1819-1909.” Megginson and Netter also examined another 16 studies of efficiency changes post-privatisation, which include studies of the UK privatisations, and also studies which cover mass privatisations including shops in Russia and industrial firms in Czech republic, Mexico and elsewhere, using a range of different measures, including profitability and sales as well as productive efficiency. The article claims that, taken together, these 15 studies “document very strong performance improvements as a result of privatization... and speak with a consistent voice documenting privatization-induced output, efficiency, and profitability increases.” But Muhlenkamp again criticises the selection of these 16 as arbitrary (“virtually every imaginable industry”), criticises the use of diverse and irrelevant indicators, and also Megginson and Netter’s interpretation of some of the results. In the light of all this, it is remarkable that Megginson himself now references Muhlenkamp as the most definitive overview on the subject of comparative public-private efficiency (although he mistakenly states that Muhlenkamp covers only healthcare) (Megginson, 2017).

Muhlenkamp himself covers 16 major surveys, which themselves covered hundreds of studies. The surveys from the 1980s and 1990s reached diverse conclusions, despite considering many of the same papers: the reviews by Bennett and Johnson (1980) and De Alessi (1980) conclude that “the evidence is overwhelming” for the superior efficiency of the private sector, and Vining and Boardman (1992) conclude that “Ownership does matter and there is strong evidence of superior PC [Private corporate] performance” while Millward and Parker (1983) conclude equally firmly: “[...] that there is no systematic evidence that public enterprises are less cost effective than private firms”. Later surveys tend to support the ‘inconclusive’ position: Martin and Parker (1997) conclude that “On balance it seems that neither private nor public sector production is inherently or necessarily more efficient”; Villalonga (2000) covers 153 separate studies, and, despite the fact that most of these claim superior private efficiency, after taking account of variations in market structures and limitations in the measures of efficiency used, finds that “the evidence about which form of ownership is associated with a higher level of efficiency remains mixed”

Other studies and reviews reinforce his conclusions.

Knayzeva et al. (2013) identify a key flaw in most previous studies as their failure to take account of the fact that the operations selected for successful privatisation are always likely to be better performers than the ones which are not selected:

“The analysis of privatization effects on performance can be confounded by endogeneity, which is overlooked in most existing studies of privatization.⁵ The common observation in existing literature that privatizations improve performance may be due to non-random choice of state-owned enterprises to be privatized....this literature, for the most part, does not address the problem of endogeneity”.

Their huge study of over 2400 companies privatised by sale between 1980 and 2009 in Europe compared their performance with companies which remained public – and compared both sets with the previous performance of the companies. This enabled them to correct for the endogeneity problem, and also controlled for the effect of other factors, including differences in size, growth opportunities, income per capita, and competition. The analysis showed, with a high level of statistical significance, that privatised companies did worse than

those that remained public, and continued to do so for a period of 10 years: “the privatization group underperforms the group of sectors remaining public”. The authors add that this fits with the experience of Russia, where: “GDP declined with privatization – faster privatization did not lead to improved performance.” The same study also included a separate analysis of the comparative efficiency of telecoms companies, internationally, using a real measure of operating efficiency, telecom lines per employee, from the International Telecommunications Union (ITU): again, the finding was that “Privatized sectors perform significantly worse” (Knayzeva et al., 2013)

A global review by the World Bank – a major supporter of privatisation – of water, electricity, rail and telecoms in developing countries concluded that: “the econometric evidence on the relevance of ownership suggests that in general, there is no statistically significant difference between the efficiency performance of public and private operators in this sector... For utilities, it seems that in general ownership often does not matter as much as sometimes argued. Most cross-country papers on utilities find no statistically significant difference in efficiency scores between public and private providers” (Estache et al., 2005). A further World Bank review in 2009 of privatisations in former communist (transition) countries in central and eastern Europe, former Soviet Union, and also in China, examined 17 studies looking at total factor productivity and 10 studies looking at profitability. It concluded that “The most important policy implication of our survey is that privatization *per se* does not guarantee improved performance” (Estrin et al., 2009).

The pioneering UK privatisations provide no better results. Early studies found that most of the improvements in productivity came before privatisation, not afterwards: municipal refuse collection services improved as much as privatised ones (Bishop et al., 1994; Molyneux and Thompson, 1987); that “longer-lasting gains in economic efficiency have been lost” (Vickers and Jarrow, 1988, p. 428); and that there is “little evidence that privatisation has caused a significant improvement in performance” (Martin and Parker, 1997). A later comprehensive analysis of all the UK privatisations concluded with careful precision:

“These results confirm the overall conclusion of previous studies that... privatisation *per se* has no visible impact [on a company’s performance]. In conclusion, I have been unable to find sufficient statistical macro or micro evidence that output, labour, capital and TFP productivity in the UK increased substantially as a consequence of ownership change at privatisation compared to the long-term trend” (Florio, 2004, p. 343).

The most comprehensive review of international research on the effects of outsourcing was published in 2012 by the Danish institute AKF. It examined studies of the effects on costs and quality of services, and the impact on employees, including in the sectors of water, waste management, electricity, public transport, education, healthcare, social care, employment, prisons and other services. It concluded that: “it is not possible to conclude unambiguously that there is any systematic difference in terms of the economic effects of contracting out technical areas and social services” but also that “The consequences of contracting out for the employees are predominantly documented as negative in the literature...stress, illness absenteeism and attrition related to changes in working conditions should ideally be included in the calculation of the consequences for employees” (Petersen et al., 2012, p. 39, 48) An overview report by the SNS Centre for Business and Policy Studies also concludes that there is no clear evidence of any efficiency benefits arising from the private provision of welfare services or the increase in competition (Hartman, 2011).

2.4. Outsourcing, long-term efficiency and flexibility

Petersen et al (2012) also noted key methodological issues: the importance of assessing effects over time, not just the first year, to take account of loss leader bids; considering the improvements that would otherwise have happened if the service had remained publicly provided; comparing transaction costs; and evaluating the effect on employees as well as on company finances. These issues are all relevant to assessing whether observed immediate changes lead to systemic long-term improvements, or are just evidence of one-off opportunism.

Thus there is evidence of initial labour-shedding by private companies, but there does not seem to be any long-term efficiency gains from this. The PIQUE project compared long-term trends in productivity, from 1970 to 2004, before and after privatisation or liberalisation, in Austria, Belgium, Germany, Poland, Sweden and the UK (PIQUE, 2009). In electricity and gas, post and telecoms, the fluctuations over time showed clear signs that productivity was significantly driven by common, globalised technologies (such as combined-cycle gas generation of electricity, or the development of digital and wireless telecoms), but showed no evidence of being affected by privatisation or liberalisation. However, the drivers of productivity changed. Before privatisation or liberalisation, most productivity gains came from increased value-added (production), whereas the main driver of post-marketisation labour productivity increases was a relative employment decrease (PIQUE, 2009). These results echo the findings of an earlier study by Griffith and Harrison (2004) in relation to electricity, gas and water, which found that liberalisation and privatisation in the EU had a significant, large, and negative effect on employment in electricity, gas, water and telecoms, and that this was the main driver of the productivity improvements in all network sectors, except telecoms and air transport. But there was no lasting effect: the observed gains in labour productivity are nearly all accounted for by a “one-off” rise in productivity caused by labour-shedding, with no continuing dynamic efficiency after the initial restructuring: “deregulation and the transfer of ownership were associated with one-off changes in the level of productive efficiency, without creating any increase in longer-term dynamic efficiency.” Nor was there any effect on total factor productivity: “as was the case with labour productivity, we did not find any significant results using the growth of total factor productivity.” Across the economy as a whole the effect of deregulation and liberalisation was actually found to be negative: they “appear to be associated with lower levels of labour and total factor productivity” (Griffith and Harrison, 2004 pp. 138, 151, 141, 105; Denis et al 2004)

Evidence from the manufacturing sector provides some insights into these results. Outsourcing of elements of manufacturing has been an important element in globalisation, with the creation of “global supply chains”, and it is assumed that this outsourcing consistently improves efficiency. But a series of empirical studies has shown this is not the case. A study of 43,000 German manufacturing firms found that firms which had outsourced more work had significantly worse performance in terms of productivity (Gorzig, 2002); a study of 256 large and medium-sized firms in Sweden found that outsourcing delivered short-term reductions in labour costs but higher administrative overheads and worse logistical performance (Bengtsson, 2008); a study of consumer electronic multinationals found that firms “cut costs by increasing outsourcing ...[but] their technology base was weakened by excessive reliance on their outside suppliers over time.” (Kotabe et al., 2008); in internet banking services in the USA, the efficiency gains of outsourcing declined and then reversed: “outsourcing has a negative, linear effect on adaptability. Adaptability problems seem to be best performed in-house” (Weigelt and Sarkar, 2012); a study of Dutch and Brazilian firms found that extensive

outsourcing has a long-term negative effect on the market share of companies. Beyond a certain point: “market share actually decreases as a consequence of further outsourcing” (Kotabe et al., 2012)

A dramatic illustration of the problems was provided by Boeing’s attempt to reduce the costs of developing the Boeing 787, known as the Dreamliner, by outsourcing more than 70% of the production process – twice the usual proportion. As part of this, Boeing dismantled its division in charge of designing electronic controls and managing suppliers: over 1200 engineers were dispersed. Instead, overall coordination and design were also outsourced. This system broke down. The contractors were unable to coordinate or design effectively, failed to deliver what was required, and made the system more complex still by outsourcing part of their work to sub-contractors. The first plane was delivered three years late - and costs grew to three times the budgeted amount of \$5billion – about \$10billion over budget. To solve the problem, Boeing had to bring huge amounts of work back in house, by taking over the software and design contractors, at a cost of \$2.4 billion: “Boeing had to take over the control of the design so that they can really continue the development process” (Cherry, 2013).

These results show: “an outsourcing productivity paradox.... In the short-run, outsourcing firms are able to reduce costs. In the long-run, firms that engage in outsourcing suffer lower productivity growth than firms that do not engage in outsourcing” (Windrum et al., 2009). Outsourcing depends on “decomposing” work into standardised activities that can be repeated with minimal variation, but this limits the ability of the firm to experiment and adapt their organisation of production to changing circumstances: “adaptability gets compromised when firms outsource. This is because solving adaptability problems benefits from a common organizational language” (Weigelt and Sarkar, 2012).

Continual outsourcing thus impacts on the core process for generating innovation in production, by increasingly reducing the area available for managers to: “raise productive efficiency by identifying organisational architectures that more effectively integrates value-adding activities and administrative routines... large scale outsourcing restricts the scope for future organisational innovation, leading to lower productivity growth... it is managerial control of interrelated productive activities that matters, not ownership per se” (Windrum et al., 2009). This also fits with studies of recent re-municipalisations of services in Germany and elsewhere, which found that the single most common reason given for taking operations back in-house, or into public ownership, was to recapture control.

2.5. Sectoral studies

One of the problems identified with the Megginson review, and a number of studies which he references, was that it covered a random selection sectors, including many in manufacturing or retail, for example, which are not strictly relevant to real world policy decisions on privatisation. These decisions invariably concern specific sectors, typically those which provide infrastructure or public services of various kinds. Whatever the general picture across the economy as a whole, it is of considerable importance to know if the same results are obtained by looking at a specific sector which is the subject of a public policy decision, because any given sector may show divergence from the general pattern.

The table shows the sectors for which there are systematic reviews and major studies, internationally. In all sectors, the results show the same picture as the general ones: the evidence does not support the assumption of superior private sector efficiency.

Table 1 Sectors covered

		Sale of assets	Outsourcing	Concessions / PPPs
1	Buses		X	X
2	Electricity	X		X
3	Healthcare		X	X
4	Ports and airports	X		X
5	Prisons		X	X
6	Rail	X	X	X
7	Telecoms	X		
8	Waste management	X	X	X
9	Water		X	X

2.5.1. Buses

The most wide ranging international study of bus services covered 73 cities with different types of bus operators, in all continents – 29 from the EU, three from Eastern Europe, five from Australia and New Zealand, five from Canada, ten from the USA, three from Latin America, two from the Middle East, eight from the Far East, five from Africa and three from Japan. It found no significant difference in efficiency between public or private operators, and also found that efficient operators can be seen on all continents:

“Statistical tests do not show any significance as regards relationship between efficiency and the type of operator....The efficient cities ... are spread over different continents and public administration styles – Anglo-Saxon, Nordic and bureaucratic – and they are not concentrated in any specific type of operator.”

It also found that the factors which were significant for efficiency were fuel use, bus-kilometers, and speed (Pina and Torres, 2001).

In the USA, an analysis of over 400 public transport authorities over 9 years compared the cost per vehicle-hour of publicly operated bus services and contracted-out services. The study adjusted for selectivity, and the extent to which efficiency savings were due to lower wages in the private sector, and, unusually, took account of transaction costs. Although private contractors were on average 5.5% cheaper than public operators, after adjusting for these other factors the study found that there was no statistically significant difference in costs attributable solely to contracting-out. The study also found lower wages in the private sector, equivalent to a reduction in costs of about 18.6% (Iseki, 2010). A study of 72 bus and metro operators across Europe found that publicly owned firms had significantly lower productivity, but noted that this could be due to selectivity: “more productive and profitable firms have been sold to private shareholders, so that only less productive firms remain in public hands”, and also that it did not take account of service quality: “we have no data on service quality”. (Boitani et al., 2013) Country studies in Catalonia, Norway, and Portugal found no significant difference in efficiency between public and private operators, though the Portuguese study noted that this may reflect the fact that public companies operate mainly in dense city areas, while private companies operate on the city outskirts (Pina and Torres, 2001; Odeck and

Alkadi, 2001; Pestana Barros and Peypoch, 2010). A study in France found that privately operated bus services were significantly more efficient than public operators, though the efficiency difference were slight and all operators were found to be very efficient (Roy and Yvrande-Billon, 2007). In Sweden, where the great majority of services have been contracted-out since 1985, there is no evidence that this use of competitive tendering has reduced costs – rather, the cost per passenger trip increased sharply in real terms from 1986 to 2009, by between 28%-228%, and efficiency levels fell steadily from 95% to 60% (Holmgren, 2013).

2.5.2. *Electricity*

In electricity as in other sectors, the belief in superior private sector efficiency is not supported by empirical evidence. The empirical evidence includes a global study in 1995 by Pollitt, which compared dozens of public and private electricity operators all over the world, and found no significant systematic difference between public and private in terms of efficiency (Pollitt, 1995). Other studies of electricity privatisation and liberalisation have found similar results for both productivity and consumer prices. A 2013 study of productivity in electricity generation in 20 EU countries found mixed results on the relationship between public and private companies, and concluded that “the link between private or public ownership with TFP is not straightforward” (Del Bo, 2013).

Similar results have been found in developing countries. A 2002 study (Zhang et al., 2002) across developing countries found that the effect of privatisation alone was statistically insignificant on efficiency, except for capacity utilisation. A global review in 2005 by the World Bank of the evidence on utility sectors, including energy, concluded: “For utilities, it seems that in general ownership often does not matter as much as sometimes argued. Most cross-country papers on utilities find no statistically significant difference in efficiency scores between public and private providers” (Estache et al., 2005). A 2008 study of electricity companies in Africa found that levels of efficiency were broadly comparable across the region, and that the performance levels, and the changes in performance levels, were quite independent of the degree of vertical integration or the presence of a private actor. A more complex study by the World Bank’s privatisation agency, the PPIAF (Gassner et al., 2009), did find that private electricity companies were more likely to cut jobs, and so show productivity gains from this source. However, the study found no evidence of any benefits for the service in terms of higher investment, and indeed there was evidence both of higher prices and of actual reductions in numbers of household connections: any productivity gains were thus distributed to owners as increased returns on capital. Further studies have documented similar evidence that the expected impact on prices and performance is lacking in developing countries, compounded by limited progress on renewables (Dagdeviren, 2009; IEA, 2016A; Sen, Nepal and Jamasb, 2016).

Insofar as efficiency is reflected in prices, most international studies have found that private ownership of electrical utilities is linked to *higher* prices for consumers than public ownership. A 2000 study by the OECD of 19 countries found that privatisation was linked, significantly, to higher prices (Steiner 2000); a 2010 study of the same group of countries found the same result: “wholly private ownership of electricity operators [is] associated with prices that were 23.1 per cent *higher* than if ownership were wholly public”, while there were no significant efficiency gains from any of the unbundling and liberalisation reforms (Dee, 2010). A 2013 analysis of electricity *and* gas prices in 15 west European countries over a 30-year period found that “after

controlling for other factors, *public* ownership is associated with lower residential net-of-tax electricity prices” (Fiorio and Florio, 2013) and by a substantial amount: “the net effect is [a reduction of]...up to 30% on net-of-tax prices, or 20% on gross-of-tax prices” (Florio, 2014). In the same year, the prices of public sector electricity suppliers in the USA are about 13% lower than the prices of private companies (APPA, 2018). A 2007 study covering 83 countries found varying results – privatisation was linked to lower prices for industrial consumers in developed countries, linked to *higher* prices for households in Asian and CEE countries, but otherwise made no significant difference” (Nagayama, 2007).

Following privatisation in the UK, electricity prices performed no better than in other countries, such as France, which did not privatise. Although there was a reduction in costs after privatisation (about 5%) these cost savings were more than offset by the higher profits extracted, except for the largest industrial consumers, so that consumers “seem to be paying higher prices than they would have under public ownership” (Newbery and Pollitt, 1997), by as much as 10% to 20% (Branston, 2000).

Table 2 Public-private price differences in USA and EU

	Public energy provider price is lower than private company price by:	Source
USA	-12%	APPA, 2015
Europe (EU15)	-20% to -30%	Florio, 2014 ; Florio and Florio, 2013

In the electricity sector privatisation was reinforced by “reforms” of the sector which were designed to create competitive environment by separating the ownership and operation of the grids from generation, and both from supply. The reforms have however not necessarily succeeded in creating competition, and the impact on efficiency has been negative according to a number of studies.

A study of comparative efficiency in the USA at the system level found that electricity systems in deregulated states “have lower productive efficiency, and have also experienced decreases in efficiency over time. In particular, the vertical separation of generation, a hallmark of an effort to deregulate the industry, is associated with an adverse impact on productive efficiency” (Goto and Makhija, 2009). These losses were quantified in a further study (Meyer, 2012), covering both Europe and the USA, which found that unbundling transmission and distribution networks results in 2%–8% efficiency losses due to the loss of coordination, and the separation of retail and generation can increase costs by 20% or more, due to the increased risk for both generators and retailers.

In 2009 the Electricity Journal published a global review of liberalisation and deregulation in the USA, EU and other OECD countries, written by the director of the Electricity Consumers Resource Council (ELCON), which represents industrial consumers of electricity in the USA, who were expected to benefit from deregulation. The review identified a pattern of problems recurring across countries, including higher prices, “gaming”, oligopoly, lack of competition, lack of investment or innovation, and consumer opposition, concluding that: “the structure of

today's 'organized markets' is neither competitive nor sustainable" (Anderson, 2009). The most damaging episode occurred when California decided to liberalise its electricity market in 1999, but the following year the state experienced months of blackouts and price spikes, as a result of "suppliers exercising market power" (Joskow and Kahn, 2002): the only part of California to escape the blackouts was the city of Los Angeles, which continued to be supplied by a public sector utility. Other blackouts and failures in deregulated and liberalised systems occurred in 2003 in the northeast USA, Italy, Switzerland, southern Sweden, and Malaysia (Hall, 2004).

2.5.3. *Healthcare*

The international evidence, and evidence from individual countries, strongly suggests that public providers have higher levels of technical efficiency than the private sector in healthcare. Public financing and provision of healthcare is also far more effective than private provision in delivering better health, including longer life and lower infant mortality rates – see section 5 below.

A report in 2010 for the World Health Organisation (WHO) surveyed the global evidence on the comparative technical efficiency of public and private providers of healthcare. The largest study was a systematic overview of 317 papers, which concluded that: "public provision may be potentially more efficient than private... Summary statistics showed average for-profit hospital efficiency levels at 80.1%, not-for-profit at 82.5%, and public at 88.1%" (Hollingsworth, 2008; Hsu, 2010).

The wastefulness of private-based healthcare comes not just from its selectivity but from its administrative overheads and use of unnecessary treatments. A report by the Institute of Medicine on healthcare in the USA found that:

"30 cents of every medical dollar goes to unnecessary health care, deceitful paperwork, fraud and other waste. The \$750 billion in annual waste is more than the Pentagon budget and more than enough to care for every American who lacks health insurance....Most of the waste came from unnecessary services (\$210 billion annually), excess administrative costs (\$190 billion) and inefficient delivery of care (\$130 billion). Repeating colonoscopies, early imaging for back pain, and brain scans for patients who just recently had them or didn't need them are examples of wasteful care" (Basu et al., 2012).

A 2012 review of the efficiency of healthcare delivery in developing countries looked at a range of research studies, including case studies, meta-analysis, reviews, case control analyses and NGO reports from countries in South Asia, East Asia, Pacific, Sub-Saharan Africa and Latin America. It found that there was no evidence to show that the private healthcare sector is more technically efficient or effective than public providers: "Studies evaluated in this systematic review do not support the claim that the private sector is usually more efficient, accountable, or medically effective than the public sector" (Basu et al., 2012).

A review of 33 studies of NHS services in the UK examined evidence on outsourcing of cleaning, facilities management, "out of hours" medical services, treatment centres, clinical services, and IT. It found negative impacts of outsourcing on service quality in 18 cases and positive impacts in four cases. The study concluded that: "much of the evidence demonstrates either the negative aspects of introducing competition into the provision of health care

services or inconclusive results...overall, there is a lack of evidence to show that outsourcing leads to improved quality of patient care” (Lethbridge, 2013).

“New public management” (NPM) techniques, including outsourcing, have not delivered greater efficiency in Spain. A recent study of NPM in Madrid hospitals looked at the number of hospital beds, doctors and nurses as inputs, and hospital discharges and outpatient visits as outputs (and also deaths in hospital and patient readmissions as undesirable or negative outputs). It concluded: “We do not find evidence that NPM hospitals are more efficient than traditionally managed ones... there is no difference in terms of technical efficiency between traditionally managed hospitals and those adopting new management formulas” (Alonso et al., 2015).

A comprehensive study of the impact of privatisation on all forms of social services in Sweden could find no evidence of improvements in efficiency or quality. The study covered all major welfare areas: preschool, school, individual and family care, health and medical care, labour market policy and care of the elderly and disabled. It concluded that:

“there is a remarkable lack of knowledge of the effects of competition in the Swedish welfare sector. On the basis of existing research, it is not possible to find any proof that the reform of the public sector has entailed the large quality and efficiency gains that were desired” (Hartman, 2011).

2.5.4. *Ports and airports*

Ports and airports have been developed over the years by governments and municipalities, because they are crucial for international trade and travel, and so are important to the development of local economies. Since the UK privatisations of British Airports Authority and Associated British Ports under the Thatcher government in the 1980s , there have been privatisations (and liberalisation), in both high income and developing countries, including in Germany, Australia, China, Malaysia, and elsewhere. Many recent and proposed privatisations take the form of PPPs, notably in India, and also the USA. The World Bank has actively encouraged these privatisations and PPPs, and they are included in conditions of IMF loans, for example Portugal. Especially with airports, there has been controversy over the performance and impact of these projects.⁵⁹

A review article published in *Transport Policy* at the end of 2012 (Gong et al 2012) found that the empirical studies do not support the widespread policy assumption that ports and airports will be operated more efficiently as a result of privatisation:

“The results... of the airport and seaport industries do not provide clear patterns of superior performance associated with particular forms of ownership or organization... A main conclusion of our paper is that there is not yet enough empirical evidence to enable a reliable assessment of the extent of success or failure of airport and seaport privatization programs. Until then, a healthy dose of skepticism is recommended when considering any

⁵⁹ For an account of the position as at April 2013, by supporters of privatisation, see: <http://reason.org/news/show/apr-2013-airport-privatization>; the ICIA provides country profiles on airport sector http://www.icao.int/sustainability/pages/Eap_ER_Databases_CaseStudies_ANSPs.aspx; for problems with airport PPPs in India, see <http://www.economist.com/news/finance-and-economics/21568397-indias-love-affair-public-private-partnerships-faces-stern-test-rippp>.

proposed privatization program proposed on the grounds of (mere) potential efficiency gains” (Gong et al., 2012).

The majority of the studies reviewed have concluded that there is no empirical evidence of superior private sector efficiency. Similar results appear across time and across different types of country.

- A 1999 study of the performance of the UK airport operator BAA, covering the years before and after its privatisation, concluded that “privatisation had no noticeable impact on technical efficiency” (Parker, 1999).
- Comparative studies of the largest container ports in the world, published in 2000 and 2001, found that public or private ownership did not seem to have any significant influence on efficiency (Notteboom et al., 2000; Valentine and Gray, 2001).
- Studies of over 100 of the largest airports in the world, published in 2006 and 2008, found significantly better performance by private airports in general, but that public sector airports in the USA were just as efficient as their counterparts; and also found that airports with private majority ownership derive a much higher proportion of their total revenue from non-aviation services (Oum et al., 2006)
- A 2005 study of container ports found that privatisation had a variable effect on efficiency, and that port size was the most significant factor (Tongzon and Heng, 2005).
- Comparative studies of public and private Chinese airports published in 2008, found that the form of ownership had no statistically significant effect on productivity growth (Fung et al., 2008)

2.5.5. Prisons

Prison privatisation started in the USA in the 1980s, was introduced into the UK and Australia in the 1990s, and had also been used in France, Brazil and South Africa. The policy is highly contentious in all countries. The great majority of comparative studies concerned the USA, where prison privatisation has been introduced most widely and for a longer period.

A 2009 review of 12 studies on the comparative efficiency of public and private prisons, found that half showed private prisons as cheaper, a quarter showed public as cheaper, and the rest showed no difference: the average was that private prisons were 2.2% cheaper. On quality, the results for 45 different indicators were almost exactly split between public and private superior performance. The differences emerging from all studies were so small that they could not justify one choice or another:

“Results suggest privately managed prisons provide no clear benefit or detriment. Cost savings from privatizing prisons are not guaranteed and appear minimal. Quality of confinement is similar across privately and publicly managed systems, with publicly managed prisons delivering slightly better skills training and having slightly fewer inmate grievances” (Lundahl et al., 2009).

This conclusion echoed that of previous overviews. A meta-analysis in 1999 focussed on comparative cost efficiency, measured by cost per prisoner day, and found that the differences were insignificant: “The results revealed that private prisons were no more cost-effective than public prisons, and that other institutional characteristics—such as the prison’s size, age, and security level—were the strongest predictors of a prison’s daily *per diem* cost”

(Pratt and Mahs, 1999). A review in 2003 analysed results on both cost-efficiency and quality of service. On costs, it concluded firmly that “the existing cost comparisons offer little in the way of firm conclusions about whether turning over the responsibility of managing prisons to the private sphere will result in any substantial and/or consistent cost savings”; and on quality, that: “the studies are too methodologically diverse (and often too methodologically weak) to draw any firm conclusions” (Perrone and Pratt, 2003).

Specific studies show a range of results and identify the importance of other factors affecting efficiency. For example, a study of three closely matched prisons in Louisiana – 2 private and 1 public – found that the private prisons were cheaper per inmate day, and also reported fewer critical incidents; but the public prison had fewer escapes, fewer sexual assaults on inmates, better systems for controlling drug abuse, and provided a wider range of educational and re-habilitation services (Archambeault and Deis, 1998).

A study of evidence from Brazil, France and the USA found different patterns of outcome from public and private prisons in terms of costs and quality. It noted variations in the levels of discretion, pay and conditions, and monitoring, and concluded that ownership was not the key factor. A further analysis by the same authors suggested that adequate private performance depended on “on-site public supervisors with strong career concerns...[ability] to learn from experience of public supervisors...and external constituencies monitor the outcomes of the arrangement” (Cabral and Saussier, 2013; Cabral et al., 2013).

In the UK, the comparative evidence remains contentious. A new report in July 2013 found that two out of 12 private prisons were officially rated at the lowest grade (compared with only one out of 120 publicly-run prisons). A review in 2012 stated that:

“There is a dearth of empirical evidence assessing the relative cost effectiveness of privately run prisons. The most recent comparative study is over 10 years old (1998-99), and was sponsored by the Home Office... The report found that privately operated prisons offered an average savings of 13% in cost per prisoner. This figure has sparked disagreement... It has been difficult to resolve this area of disagreement since financial information on private prisons is currently kept confidential” (Institute for Government, 2012).

Another recent analysis of prison privatisation in the UK addresses the issue of system efficiency. A wide range of performance indicators were introduced to monitor the performance of individual prisons, each run with a separate contract. The analysis found not only that this monitoring by targets became burdensome, but also diverted attention onto individual prisons instead of evaluating the system as a whole, showing:

“how difficult it is to draw boundaries around the performance of individual prison entities. The reduction of re-offending, for example, could not be measured at the level of individual prison establishments, because of the frequent movement of prisoners in between prisons. Also inter-organisational activities, for example, in the form of information exchanges and mutual aid, remained unaccounted for. All this contributed to a decentring of Prison Service accountability and a shift in emphasis from the Prison Service as a whole to individual prison entities. We observe a ‘narrowing of the basis of accountability’ Notions of failure and failing came to be connected to individual, failing prison organisations, rather than the prison system as

whole. Attention has been deflected from issues concerning the roles of the prison in society, alternatives to imprisonment, and general criminal justice issues” (Mennicken, 2013).

2.5.6. *Rail*

The relative efficiency of railways is affected by many factors, including treatment of capital costs, subsidies, public objectives, density of networks, size of the country, extent of electrification, relationship between freight and passenger transport, integration of train operation and track maintenance, and alternative transport modes such as road, air and water.

A recent report surveying international evidence on factors affecting railway efficiency summarises the evidence on the effect of privatisation itself as “mixed”:

“Privatization efforts in the past two decades have shown mixed results. In some cases, privatization has resulted in improved performance and higher cost efficiency. In other examples, privatization of railways has resulted in the neglect of rail assets to achieve short term financial improvements, higher refinancing costs and (increased) equity yield rates... Significant drawbacks can result from privatization, but Mexico has seen strong growth as a result of privatization in the 1990s” (Beck et al., 2013).

In the UK, prior to privatisation, British Rail (BR) achieved substantial productivity gains by sectoral reorganisation in the 1980s. In some international comparisons, BR appeared as amongst the most efficient operators. However, the initial productivity improvements under the private sector were not so good: “Gains made in the early period of private sector management... are not as high as those made in the later period of public sector management” (Cowie, 2010). After the unbundling and privatisation of UK railways in 1996, the productivity of train operating companies initially rose, principally as a result of reductions in staffing levels. But it then deteriorated, and by 2006 was worse than at the start: “a given set of passenger rail services in 2006 cost 12% more in real terms than it did at privatisation”. Costs fell again after 2006, but still remained higher than at privatisation: and “it remains the case that passenger rail franchising in Britain has failed to reduce costs in the way experienced in many other industries and in rail elsewhere in other European countries” (Smith et al., 2010). Government subsidies declined in the early years, but increased again, at the same time as productivity fell. The quality of service was also affected, most brutally in the lower standards of track maintenance which led to a number of major accidents, but also in higher levels of train cancellations (Cowie, 2009). An official report (McNulty, 2011) concluded that the objectives of privatisation have not been achieved, including expected efficiency gains, and that rail fares are already too high. Rather, the report found that efficiency had not improved, and the complex relations and transactions involved in an unbundled system: “Unit costs per passenger kilometre have not improved since the mid 1990s... costs ought to be 20-30% lower. Further benchmarking has identified an efficiency gap of 40% against four European comparators”; “among the principal barriers [to efficiency] are fragmentation of structures and interfaces, the ways in which the roles of Government and industry have evolved, ineffective and misaligned incentives, a franchising system that does not encourage cost reduction sufficiently...”

2.5.7. *Telecoms*

There have been great advances in telecoms technology and use and access in the last 25 years – but international studies show that in this sector, too, efficiency gains are not due to privatisation.

In fact, the most recent global study comparing private and public companies found the opposite. It analysed the operating efficiency of countries which had privatized between 1990 and 2000 and countries whose telecom sectors remained public, as measured by line connections per 1000 employees. It looked at the long-run performance before and after privatisation compared with the long-run record of companies which remained public, and found that, although both privatised and public companies improved efficiency: “privatized sectors perform significantly worse” than companies which continued to be state-owned (Knyazeva et al., 2013).

A further study by the same team (Knyazeva et al., 2009) measured performance of 54 telecoms companies in a range of countries by the proportion of people connected to the phone network, levels of investment, and total telecoms revenues, confirmed that privatised industries did not perform better than public sector companies after prior performance was taken into account, and that privatisation itself made no significant contribution to performance. Instead, they found that access to finance for investment made the crucial difference – it was the constraints on borrowing that held back firms in the public sector. A study of 31 telecommunication operators from countries in all regions of the world between 1981 and 1998 found that privatisation had no significant effect on output per employee – and that competition had a significantly *negative* effect – whereas higher salaries had a significant positive effect on efficiency (Bortolotti et al., 2002).

A study of long-distance, international and mobile telephony in 23 OECD countries between 1991 and 1997 found no connection between performance – in terms of lines, mobile subscribers and international calls per 100 employees – and privatisation: “no clear evidence could be found concerning the effects on performance of the ownership structure of the industry”. It did however find evidence that “productivity levels are negatively influenced” by the prospect of privatisation; and competition, and the prospect of it, were linked to productivity improvements – though not to price reductions. Factors specific to each country had a much greater effect on both price and quality than all the impact of privatisation and liberalisation combined (Boylaud and Nicoletti, 2001).

A cross-country study of the impact on consumer prices of European telecoms liberalisation and privatisation found that the price of international and national phone calls were significantly reduced by an increase in the number of mobile phone users, and by higher levels of investment – but liberalisation and privatisation themselves made no difference. The authors conclude:

“The findings suggest that ownership change, from public to private, plays no role or a very limited one in explaining prices of international, national, local calls, and connection charges... Overall, it seems that technology and demand factors... have much more explanatory power” (Bacchiocchi et al., 2011)

A comparison of the performance of all major European telecoms operators between 1978 and 1998, measuring both in terms of profit margins and labour and total factor productivity, found that growth rates in both labour productivity and total factor productivity were generally worse after liberalisation was introduced around 1995, and so concluded that it was “difficult to find a consistent pattern of performance improvement linked to either privatisation or the anticipation of market liberalisation”. The role of technology was ignored as the technological innovators are not the telecoms companies themselves but the phone and equipment manufacturers – adoption of technology was thus a matter of competent shopping (Dassler et al., 2002).

In Ireland, the state-owned telecoms company Eircom was corporatized in the 1980s, and privatised in 1999 by flotation. The company achieved significant growth in total factor productivity in the 1980s and 1990s – the best performance in Europe, leaving it as efficient as any European telecoms company by the time it was privatised (Dassler et al., 2002; Pentzaropoulos and Giokas, 2002) – due to both cuts in employment, investment in new technology, internal reorganisation, and the prospect of liberalisation – but this slowed after privatisation. It was subsequently taken over by private equity groups, which increased its debt levels enormously, resulting in bankruptcy in 2012. Overall: “The lesson for policymakers is that privatisation will not necessarily result in improved performance” (Palcic and Reeves, 2013). By contrast, telecoms companies which are wholly or partly state-owned have been more successful in expanding internationally (Alonso et al., 2013).

Research on the development of mobile telecoms in the 1990s concluded that the development of digital technology and the licensing decisions of individual countries were the most important factors; that the introduction of competition had relatively little impact; and that incumbent telephone companies were not obstacles to development: “the effect from technological innovations has been much stronger than the effect of increasing the number of firms” (Gruber and Verboyen 1999).

2.5.8. *Waste management*

Systematic reviews of empirical studies in waste management and water from different countries concluded that “private production of local services is not systematically less costly than that of public production” (Bel et al, 2010). The same result emerged from a formal statistical analysis of 27 *econometric* studies of the waste and water sectors in several countries:

“there is no statistical support for an empirical effect of private production on costs ... costs are dependent on service characteristics, geographic area, and time period of the study.. We do not find a genuine empirical effect of cost savings resulting from private production” (Bel et al, 2010).

Both international and national studies of waste management have concluded that there is no significant difference between the costs of public and private provision in comparable circumstances.

Many of these studies identified other factors which were more significant in terms of their impact on efficiency, in particular size. In Japan, for example, areas with many small islands tended to have less productive waste management; in Spain, small municipalities that operate a joint service are more efficient than those that operate their own; in Italy, the use of

separated or non-separated waste collection. In India, formal systems of municipal waste collection remain under-developed, and a national survey concluded that “lack of resources such as financing, infrastructure, suitable planning and data, and leadership, are the main barriers” (Sharholly et al., 2008).

Studies in individual countries have come to similar conclusions. A 2013 study of waste collection in Wallonia, the French-speaking region of Belgium concluded simply: “public operators perform no worse than private operators” (“*Nos résultats montrent que, dans le cas de la collecte des ordures ménagères brutes, la production publique n’est pas moins performante que la production privée*”). Two-thirds of the work is carried out through intercommunal bodies, and two-thirds of them contract private operators (nearly all to one of two companies, Sita or Shanks). As the table shows, this is by far the most expensive form of refuse collection, measured by tonne collected: all inter-communal operations are more costly – the same result was found in Norway, where inter-municipal refuse collection services were found to be about 10% higher than services provided directly by a single municipality (Sørensen 2007) – but private ones most of all. Again, other factors are significant, but for public service objectives rather than efficiency: some municipalities have introduced bins with microchips that measure the weight of refuse, and this did not increase costs, but did lead to a significant reduction in the amount of refuse placed in bins (Gautierand Reginster, 2013).

Table 3 Belgium: cost of public or private waste collection by commune or inter-communal body

Method of collection	Share of service in region	Cost per tonne of refuse collected
Intercommunal : private	45 %	622
Intercommunal : direct	20 %	406
Communal: private	31 %	389
Communal: direct	4 %	371

Source: Gautierand Reginster 2013 tableau 2, graphique 2

In Spain, studies published in 2008 and 2013 found that public provision is cheaper or the same as private provision. An analysis of costs of street cleaning and waste collection services in Spanish municipalities with a population over 50000 found that: “There is no difference between the inefficiencies observed in municipalities managed directly by town councils and those which have been transferred to private companies” (Garcia-Sanchez, 2008). A further study of small and medium local authorities found that “public service provision via a provincial or local public company is the management form presenting lowest levels of waste collection costs...even direct management by the local authority produces lower costs than those associated with contract” (Zafra-Gomez et al., 2013).

In Italy, a major study published in 2009 examined comparative costs between direct municipal service, municipal corporations, PPPs, and private contractors, and found that costs were affected by different systems (separated or non-separated waste), and size of the area serviced, but there were only slight variations between public and private: “no significant correlation can be found among the categories. This leads us to exclude any dependence of costs on management type, or on the introduction of private capital into the service companies” (Lombrano, 2009).

In the Netherlands, a large study based on data from all municipalities between 1998 and 2010, concluded that the apparent lower cost of private provision disappeared when other factors were taken into account: “the cost advantage for private companies, becomes substantially smaller and non-significant if municipal fixed effects are included” (Dijkgraaf and Gradus, 2013).

In Sweden, government data appeared to show that the cost of private refuse collection was 25% lower than the costs of public collection. But after adjusting for selectivity by firms and municipalities, and easier collection environments: “public production, on average, was 6 per cent cheaper than private production”. The only advantage of the private contractors was that they were better at shopping, so paid 10-15% less for their vehicles (Ohlsson, 2003).

In the UK, the most recent data on costs in 2010 shows that the average net total cost of waste collection is slightly lower (by about 3%) for municipalities which operate an in-house service. This data takes account of transaction costs, capital expenditure and income. Municipalities which outsource appear to have lower current expenditure, but they still employ staff costing over 5% of the contract value, to monitor the service, still pay for much investment, so capital costs are only halved, not fully transferred to contractors, and lose income worth more than 7% of the cost of the service (Ekosgen, 2011).

In Japan, raw data showed, in terms of waste volume per truck and per worker, public operators are far more productive than private sector operators. But this was largely due to the fact that contractors were mainly used on small islands, rather than the large cities. After adjustment for these factors, differences were not significant (Ichinose et al., 2013).

The apparent cheapness of waste management contractors' costs is frequently due to the low pay of private companies. In Germany in 2011, some contractors paid such poor pay and conditions that their workers claimed benefits. The German employers and the public sector trade union, Ver.di, have agreed a minimum wage for the sector that has been declared generally binding, to prevent such cut throat competition.⁶⁰

2.5.9. *Water*

In the water sector, a stream of empirical studies and reviews provide strong confirmation of the view that there is no significant difference in technical efficiency between private and public sector operators. These include both international and national studies. A systematic review in 2008 of the global literature on all aspects of efficiency in water supply concluded simply that: “there is no hard evidence which points to a causal relation between management ownership and efficiency” (González-Gómez and García-Rubio, 2008). Another international review, published in 2010, which analysed 27 empirical studies on comparative efficiency in water (and waste management) in various countries, concluded that “private production of local services is not systematically less costly than that of public production” (Bel et al., 2010).

A comprehensive study of water supply services in France, where about three-quarters of the service is delivered by the private sector through concessions or lease contracts, found that in 2004, after making allowance for all other factors, the price of water provided by private companies is 16.6% higher than in places where municipalities provide the service (Chong et al., 2006).

⁶⁰ [In- und Outsourcing in der kommunalen Abfallwirtschaft](#)

Empirical studies in the UK have found no significant improvement in productivity performance since privatisation. A study analysed the growth in productivity in the five years before privatisation, and the ten years after privatisation, and concluded that: “despite reductions in labour usage, total factor productivity growth has not improved since privatisation” (Saal and Parker, 2001). A further study using a different method showed that total factor productivity may have improved after 1995 but “neither paper finds any evidence of an increase in TFP growth that can be directly attributed to privatisation” (Saal, 2003). Since 1999 the performance appears to have got worse. A paper commissioned by OFWAT in 2004 found a decline in productivity growth rates after 2001. This study focussed on operating expenditure, but it also found that for the water only companies “capital efficiency appears to be declining... particularly after the 1999 price review” (Stone and Webster, 2004). A further study, published in 2007, with a further change in methodology, confirmed the broad picture, and concluded that: “while technical change improved after privatization, productivity growth did not improve... average efficiency levels were actually moderately lower in 2000 than they had been at privatization” (Saal et al., 2007).

So the private companies cut jobs more rapidly than was happening in the five years before privatisation, but, although labour productivity has risen slightly faster, when other factors are taken into account, including capital, the total factor productivity of the companies has grown less rapidly since privatisation than it was doing in the five years before privatisation: the RWAs reduced employment from 80,000 to 50,000 in 15 years between 1974 and 1989, an annual reduction of over 6% (Barraque, 1995). The studies also found that the companies had been increasing their prices faster than their increases in costs: “Moreover, total price performance indices reveal that increases in output prices have outstripped increases in input costs, a trend which is largely responsible for the increase in economic profits which has occurred since privatisation” (Saal and Parker, 2001).

The evidence for developing countries shows the same picture. A World Bank paper in 2005, reviewing studies on the water industry, worldwide, concluded that “the econometric evidence on the relevance of ownership suggests that in general, there is no statistically significant difference between the efficiency performance of public and private operators in this sector” (Estache et al., 2005). In Africa, a study covering 110 African water utilities, including 14 private, found no significant difference between public and private operators in terms of cost (Zhang et al., 2004). In Latin America, a 2004 study of about 4000 sanitation operations in Brazil found that there is no significant difference between public and private operators in terms of the total variation in productivity (Seroa da Motta and Moreira, 2004); a further study in Brazil, published in 2007, also concluded that “that there is no evidence that private firms and public firms are significantly different in terms of efficiency measurements”. A paper published by the Brookings Institute in 2004 also studied the growth in water and sanitation connections in cities in Argentina, Bolivia and Brazil, and concluded that “while connections appear to have generally increased following privatization, the increases appear to be about the same as in cities that retained public ownership of their water systems” (Clarke et al., 2004). In 2004 an Asian Development Bank survey of 18 cities in Asia, which included two cities with private sector concessions – Manila and Jakarta. These were performing significantly worse than most public sector operators on four indicators of coverage, investment, and leakage: on six indicators (unit production costs, percentage of expenses covered by revenue, cost to consumers of constant level of usage per month, 24 hour supply, tariff level, connection fee) their performance is middling, not outstanding; the private cities perform relatively well on two indicators: revenue collection efficiency, and minimizing the number of staff per 1000 connections (ADB, 2004).

Table 4 Selected Asian Development Bank water indicators for 18 Asian cities

		measure		Manila (private)	Jakarta (private)	Average of 18 public cities
Water Coverage	(%)	Higher better	is	58	51	79
Sewerage Access	(%)	Higher better	is	7	2	51
Capital Expenditure/Connection	(US\$)	Higher better	is	18	47	88
Non-revenue (leakage)	Water (%)	Lower better	is	62	51	34

Source: ADB, 2004.

3. Economic impacts: growth, employment and public goods

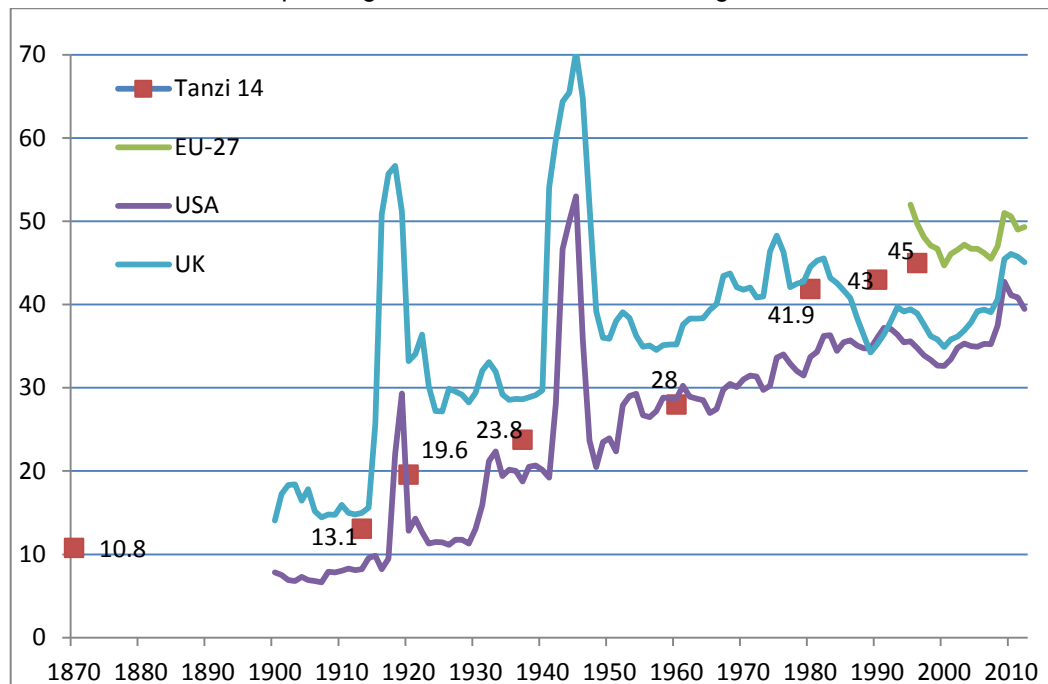
3.1 *The long-term link between growth in public spending and economic growth*

Public spending is often discussed as though it was a burden on a market economy, which would grow much faster if only public spending were cut back. But the economic history of the last 150 years shows exactly the opposite: that economic growth has gone hand in hand with a rising proportion of public expenditure since the mid-19th century. Public spending has not just risen in line with GDP, it has risen faster than GDP – and so has been rising as a proportion of GDP.

The can be seen in the chart, which presents data from four different sources, all of which show the same trends. Taxation and spending in high-income countries rose continuously throughout the 20th century as a proportion of gross domestic product (GDP), with peaks during the two world wars of the 20th century due to military spending. This is not just true of European “social democrat” countries; the same steady growth can be seen in the USA and in Japan. And the same pattern can be observed in each individual country, not just overall.

This long-run growth in public spending was used by public choice economists as evidence of the scale of the problem, showing the need for strong policies to minimise the role of the state (Buchanan and Tullock, 1977; Dunleavy, 2014). This would be a circular argument in purely economic terms, ignoring the actual economic growth that had happened in all countries over this same period. However, it was important as a self-consciously ideological political position: rational choice theory, centered on the strategic action of self-interested individuals, was seen as a core intellectual part of the political outcome of the cold war, and public choice theory was seen as a key element in this. So, alongside the economic and military victories over the Soviet Union, resisting the economic role of the public sector was seen as part of the strategy for protecting market capitalism: “the ideological triumph of democratic politics and market economics over the alternative philosophical order espoused by Karl Marx and his adherents...rational choice theory rebuilt the conceptual cornerstones of western ideals” (Amadae, 2003).

Chart A Government spending as % of GDP 1870–2012, high income countries



Sources: see note ⁶¹

The long-term rise in public spending appears to have levelled off in many countries from the 1980s and 1990s. Some analysts argue that this is because the economic advantage of public spending has come to an end in rich countries, because the burden of tax acts as an economic brake and offsets the benefits of public spending. But the same pattern of ‘levelling off’ can be seen in developing and transition countries, with far lower levels of public spending and taxation. In India, for example, the introduction of neoliberal policies in the 1990s halted the growth in public spending, until the election of a social democrat government in 2004 resulted in renewed growth in public spending. A better explanation for the levelling off is that trends in public spending depend on political decisions, and that neo-liberal politics have been dominant everywhere since the 1980s.

But the trend shifted sharply upwards again as a result of the economic recession of 2008-09. The crisis forced higher spending on benefits; and the initial policy responses, to stimulate recovery through higher government spending and borrowing, meant that globally, public spending leapt by 3% to 4% of GDP in one year.

This “long-run” link between public spending and growth is known as “Wagner’s Law” after the economist who first identified it in the 1890s, and has been confirmed by the majority of studies since then. An analysis by European Central Bank economists of 23 high-income countries from 1970–2006 confirmed “a structural positive correlation between public spending and per-capita GDP ... [and] a common development among the 23 countries and

⁶¹ The three lines on the chart are derived from data in: Tanzi and Schuknecht 2000 Public Spending in the 20th Century CUP Chapter 1 (covering 14 high income countries, including USA and Japan) <http://assets.cambridge.org/97805216/62918/sample/9780521662918wsn01.pdf>; Eurostat Government revenue, expenditure and main aggregates [gov_a_main] http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/data/main_tables; USA Public Spending http://www.usgovernmentspending.com/spending_chart_1900_2015USp_15s1li011mcn_F0t; UK Public Spending http://www.ukpublicspending.co.uk/spending_chart_1900_2015UKp_XXc1li111tcn_F0t

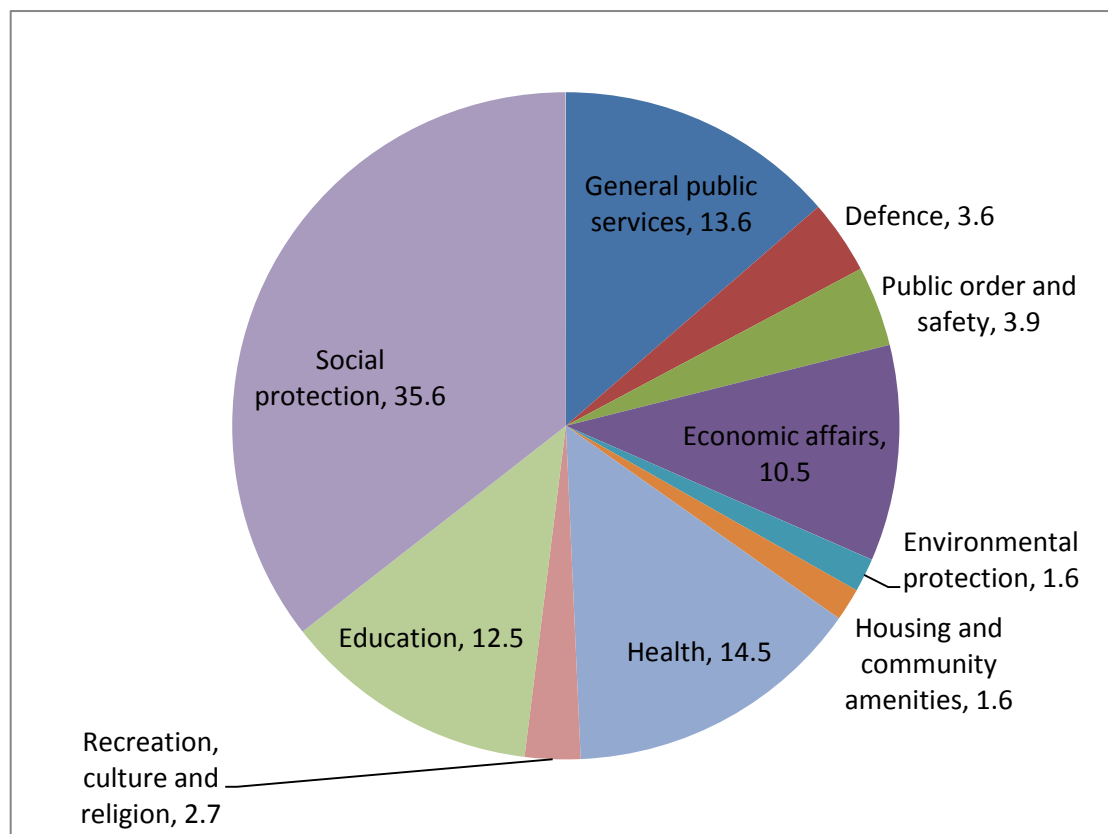
the widespread validity of the Wagner's law" (Lamartina and Zaghini, 2008). A study of 51 developing economies by staff at the International Monetary Fund (IMF) found that there was a consistent link across all countries, confirming "a long-term relationship between government spending and output consistent with Wagner's law" (Akitoby et al., 2006).

So growth in public spending is not a handicap to economic growth, but seems to be an essential part of economic growth and development, in all countries. Explanations for this link identify a range of ways in which a rising proportion of public spending helps economies:

- Public spending has a crucial role in investment in infrastructure. There are benefits to the whole economy from having good roads, railways, electricity and water supplies, but it is not profitable for private investors to build them. In all countries, infrastructure investment has been driven by the public sector (Aschauer, 1989).
- Public spending is a more efficient way of producing many services. Public spending on healthcare, for example, is much more efficient, in economic terms, and more effective, in terms of public health objectives, than private spending on healthcare (Beraldo et al., 2009)
- A healthy, well-educated workforce is more productive: "...when oriented towards health and education, such redistributive programs contribute as well to the quality of the labor force, and hence the growth potential of the economy" (Gintis and Bowles, 1982).
- Re-distribution of income increases consumer demand, because poorer people spend a much higher proportion of their income: "State-sponsored redistribution policies... place additional income in the hands of families with relatively high marginal propensities to consume" (Cameron, 1982).
- Public services are an efficient collective long-term insurance mechanism. In industrialised economies, a public system of collective support in sickness, unemployment, old age etc., replaces the role of the extended family in agricultural societies. Provision of public services and social security allows people to spend more instead of using savings to protect themselves.
- There is a general benefit to social and economic stability: "The possible patterns of economic evolution consistent with the no-welfare-state option include chaos, stagnation, and the development of new and perhaps unprecedented economic systems" (Gintis and Bowles, 1982).

The chart below shows the actual distribution of the functions of public spending in OECD countries.

Chart B Functions of public spending, OECD countries, 2011



Source: OECD 2013A

3.1.1. Infrastructure

Investment in electricity, water and sanitation, roads, rail, and telecoms has played a major role in the growth of high-income countries, and is equally crucial in developing countries. For example, much of the economic growth and productivity of the USA in its “golden period” in the mid-20th century was due to the growth in roads and energy infrastructure, the great majority of which was publicly financed (Field 2007, Calderon and Servén, 2008).

By contrast, government spending in Latin America on human and physical infrastructure in the 1980s and 1990s, “dropped precipitously” during the period when the IMF imposed its structural adjustment policies, and led to a fall in economic growth: “... a major portion of the per-capita output gap that opened between Latin America and East Asia over the 1980s and 1990s can be traced to the slowdown in Latin America’s infrastructure accumulation in those years”. Most South American countries have since deliberately paid off their loans from the IMF, to enable them to pursue more rational economic policies, in which public spending on infrastructure has played a key role. In 2007 Brazil launched a four-year programme for economic growth, (the Programa de Aceleração do Crescimento), based on the public investment of USD \$236billion in roads, electricity, water, sanitation and housing (Calderon and Servén, 2004; Jonakin and Stephens, 1999; Lora, 2007; Brasil Gov Fed, 2014).

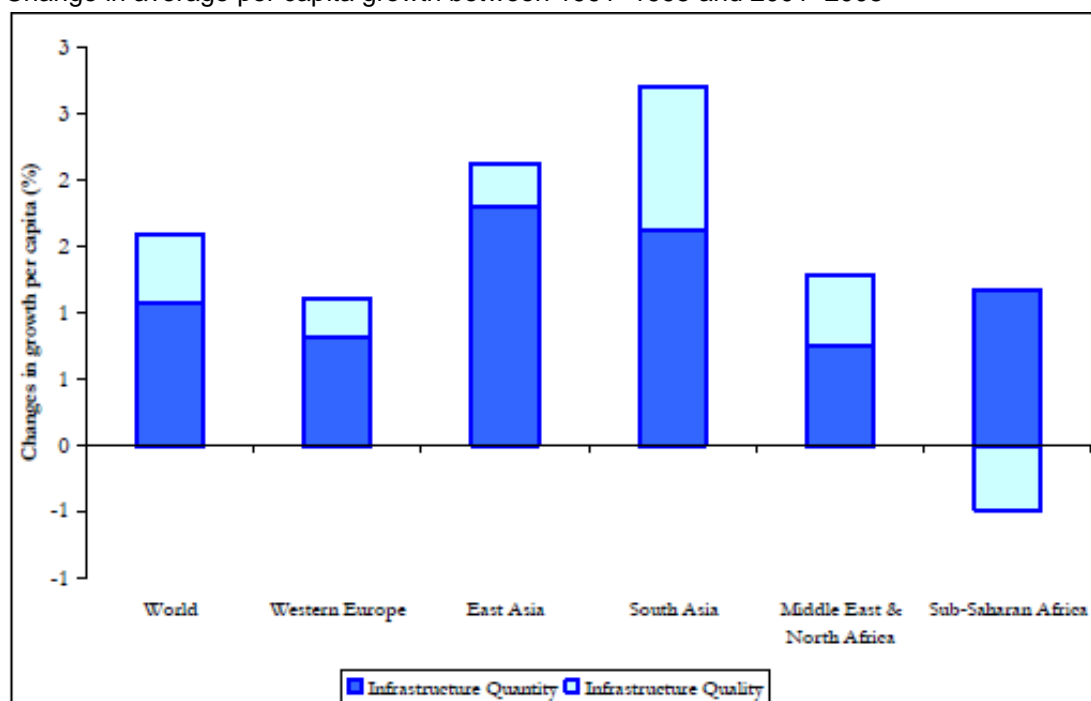
In Africa, by contrast, the level of infrastructure spending remains inadequate, for exactly the same reasons as in Latin America in previous decades:

“Spending has actually been on a declining trend in many countries, partly as a result of the disproportionate toll that the fiscal adjustment of the 1990s took on public infrastructure spending, and also reflecting the fact that private sector participation has failed to live up to expectations.”

A 2010 report on infrastructure investment in Africa found that the contribution of the private sector has been close to zero in water, electricity and transport: there has only been some private investment in telecoms: “the public sector remains the dominant source of finance for water, energy, and transport in all but the fragile states”. If Africa caught up with the infrastructure investment levels of other world regions, growth rates would increase by 1–2% (Calderon and Serven, 2008; World Bank/AFD, 2010).

Chart C Change in growth due to infrastructure development

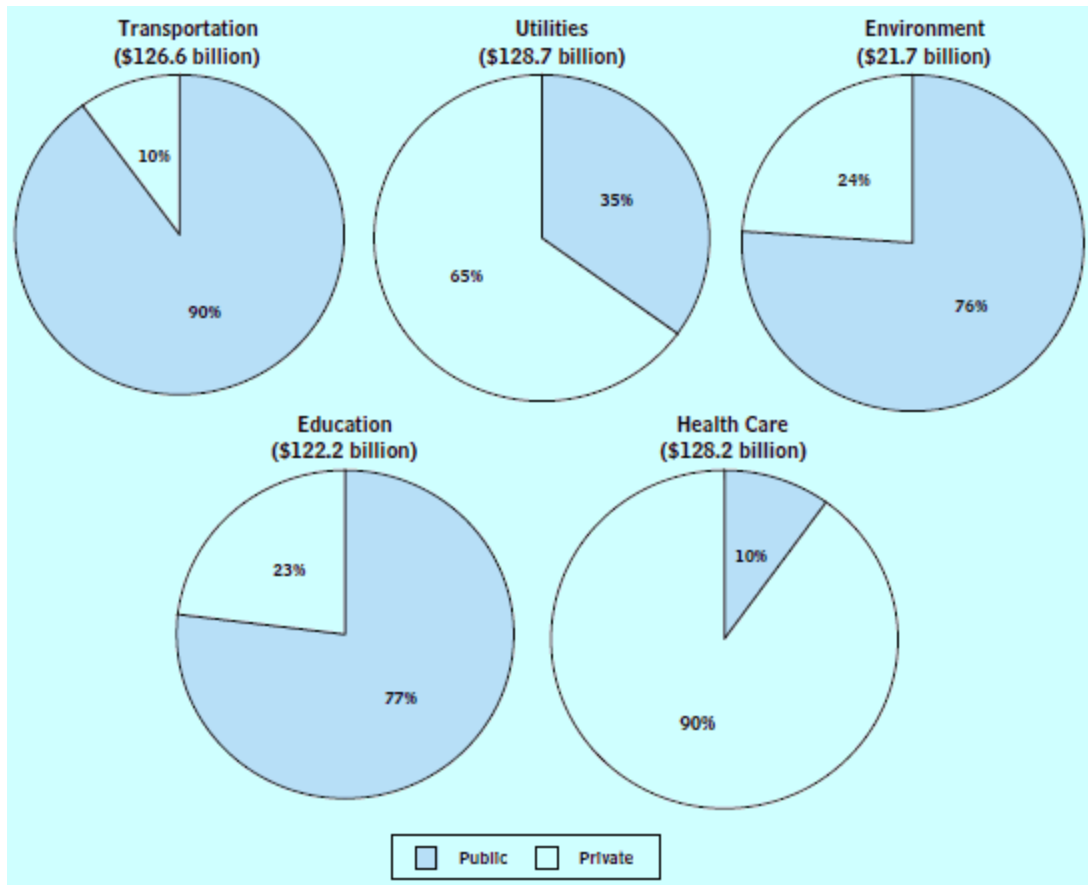
Change in average per capita growth between 1991–1995 and 2001–2005



Source: Calderon and Serven, 2008

The principal mechanism for financing infrastructure development, worldwide, is still through government and the public sector, even in technically advanced sectors such as telecoms. In Europe, private telecoms network operators are reluctant to make sufficient investment in the fibre-optic networks which are crucial to greater use of the internet, so the EU demands more public finance, calling on governments: “To draw up operational high speed internet strategies, and target public funding, including structural funds, on areas not fully served by private investments”. Even in the USA, where the role of the state is relatively small, Chart H shows that the great majority of investments in transport, education, and environment are public – and even 35% of utility investment is public sector; only in healthcare is the public proportion low (the only high income country where this is true) (EU, 2010; CBO, 2009).

Chart D Capital spending on USA infrastructure 2007



Source: CBO, 2009

3.1.2. *Support for industry and innovation*

Significant parts of public services support other economic activity by the private sector. These include the provision of a legal system, courts and police, which both protect property rights and provide ways of enforcing contracts. The modern company itself is a legal entity dependent on privileges given by the state, including “limited liability” which allows companies to fail and go bankrupt without the individuals running them being liable to any of the firm’s creditors.

Virtually every sector in modern economies relies on significant economic support from the state. In some sectors, in many countries, this takes the form of public ownership – for example of public transport, electricity and water – and, in many countries now, of banks and financial institutions. Many sectors depend on public spending for contracts for goods and services, which represents about 16% of GDP in high-income countries. This includes many firms in the production sector, such as arms manufacturers or pharmaceutical companies, both of which rely principally on government orders. Some firms in the services sector also benefit, as a result of outsourcing policies, for example in auditing, IT, or cleaning services. The construction industry benefits from long-term guarantees of government payments for public works contracts, under PPPs and under ordinary contracts. Governments and development banks lend money to companies at rates which they could not obtain commercially. Implicit and explicit guarantees are given to customers of European banks during the crisis – the only thing which makes banks ‘safe’ places to hold an account.

The private sector claims that innovation by entrepreneurs and corporations is the great driver of improved economic performance and living standards. But much of this innovation, even in high tech sectors such as pharmaceuticals, computing and telecoms, originates with the public sector:

- 75 per cent of the new drugs approved in the USA between 1993 and 2004 originated from research in the publicly funded National Institutes of Health (NIH) labs.
- Monoclonal antibodies, the foundation of modern biotechnology, were discovered by researchers funded by the UK government.
- The world-wide web, the internet, computers themselves were all developed by and in the public sector; and the US National Science Foundation funded the algorithm that drove Google's search engine.
- Apple got early funding from the US government's Small Business Investment Company, and made heavy use of government-funded research in the iPhone : "All the technologies which make the iPhone 'smart' are also state-funded ... the internet, wireless networks, the global positioning system, microelectronics, touchscreen displays and the latest voice-activated SIRI personal assistant." (Mazzucato, 2013; Wolf, 2013; Gordon, 2012).

The supportive role extends beyond innovation to the wider provision of efficiency-enhancing information and access to corporate finance. A study of local government assistance to firms in China (Cull et al., 2017) found that

"government provision of information about products, markets, and innovation and government assistance in arranging loans are positively associated with firm efficiency, and those private firms with weak access to and knowledge of financial, input, and product markets benefit most from such assistance."

3.2 Employment

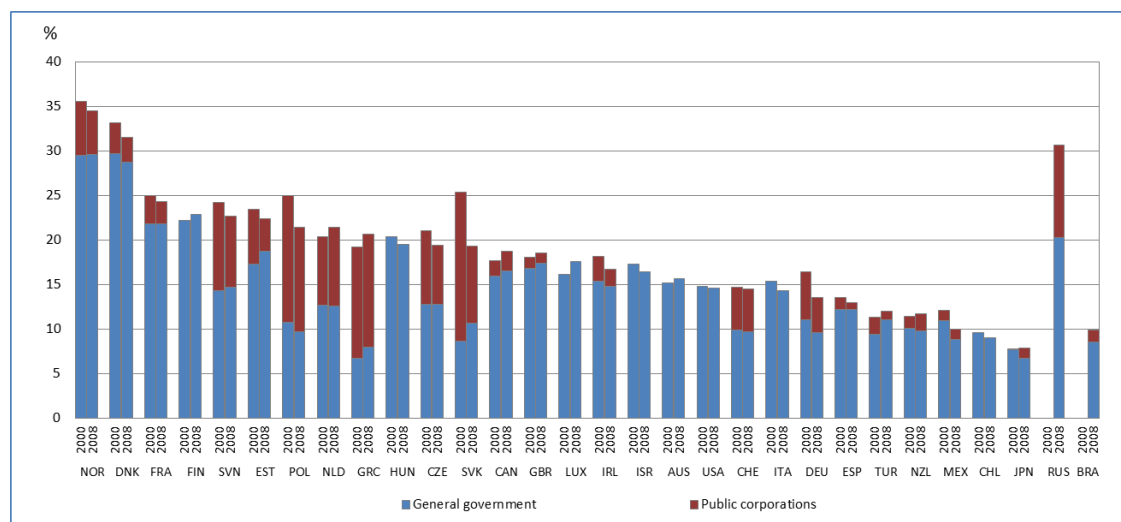
Public spending supports employment, in both high income and developing countries, in a number of ways:

- direct employment of public service workers;
- indirect employment of workers, by contractors supplying outsourced goods and services;
- employment of workers on infrastructure projects;
- extra demand and jobs from the spending of the wages of these workers and also of recipients of social security benefits (the "multiplier effect");
- subsidies to support employment by private companies, or by providing employment guarantees;
- providing formal jobs with decent pay and conditions;
- government procurement is used to require "fair wages" from private contractors, to reduce gender and ethnic discrimination, and strengthen formal employment of local workers.

The combined effect of these mechanisms is to support half the formal jobs in the world.

In OECD countries, employment in general government was on average about 15% of all employees in 2008, as shown in Chart I. There is a wide variation: in 2008 governments in Norway and Denmark employed close to 30% of the labour force, but the government of South Korea employed only 5.7%. The levels are higher when employment in public corporations is added, for example 4.0% of employees in Germany are employed by public corporations (OECD, 2008).

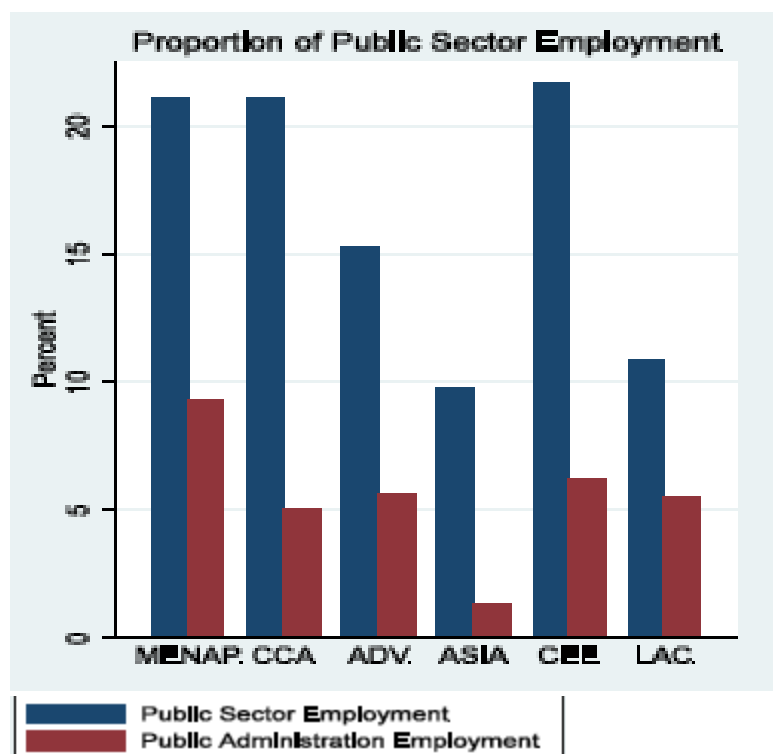
Chart E Employment in general government and public corporations as % of total labour force, 2000 and 2008, OECD countries



Source: OECD 2011

Data on public employment in developing countries is poor. The ILO estimated in the 1990s that on average in developing countries public employees accounted for about 23% of employees, slightly higher than high income countries. An recent IMF paper in 2013 estimated that public sector employment in eastern Europe, central Asia, Middle East, and North Africa was about 21%–22%, but in Asia and Latin America it was only 9% and 11% respectively; (it had no estimates for sub-Saharan Africa). The IMF figures for Asia reflect the data for the Asian and Latin American OECD countries of Japan and South Korea, Mexico, Chile and Brazil, but they seem to underestimate the role of the public sector in the world's two largest countries, India and China (ILO, 1999; IMF, 2013).

Chart F Public sector employment as % of total employment, developing countries



Source: IMF 2013

The public sector plays a key role in creating “formal” employment in developing countries – that is employment with defined pay and conditions, legal rights, and social security.

In India, about 84% of workers are in the informal sector, with no social security or employment rights, half of them classified as self-employed, and the largest numbers in agriculture. The remainder work in the formal (“organized”) sector, but even here, half the workers lack any formal rights. The result is that only about 8 per cent of all workers in India enjoy any statutory protection against such risks as sickness, maternity, disability and old age. The public sector is crucial for the supply of quality jobs. In 2008, 64% of those employed in the formal sector were public employees. It is especially important for women: only 5.2 million have the chance of quality jobs in the formal sector, and over half of those - are in the public sector, overwhelmingly in community and social services. But public sector employment has been slowly declining since the 1990s, as a result of deliberate policy decisions to reduce the size of the state. Between 1991 and 2008, the number of public formal sector jobs declined by 14 million, which was only just offset by a growth of 21m. private formal sector jobs (Papola and Sahu, 2012; Paul et al., 2011).

A similar pattern can be seen in Brazil. Although the OECD reports public sector employment in Brazil as only 10% of total employment, it represents a much higher proportion of formal employment. In the major cities of Brazil, 27.5% of workers with formal contracts are employed in the public sector – and for women the proportion is even higher, more than one-third (Daulins et al., 2012).

The table below shows estimates of the proportion of jobs supported by public spending, globally, including the additional jobs supported by the “multiplier effect” of consumer

spending. They are based, conservatively, on the estimates of the OECD and the IMF that general government employment represents about 15% of all employment, with a further 4% of employees in other state-owned companies.

The result is that:

- Public spending supports 40% of all jobs: 15% in the form of public employees, but a further 25% in the private sector supplying goods and services for governments and employees.
- Including the employment in public service utilities, public spending and public services support 50% of the jobs in the economy – twice as many in the private sector as in the public sector.

Table 4 Global jobs supported by public spending and public services (as % of all employees)

Public spending by category	Jobs supported	Multiplier effect of workers spending	Additional jobs supported by multiplier effect	Total	... of which	
					Public employees	Private sector employees
	As % of total employees		As % of total employees	As % of total employees	As % of total employees	As % of total employees
Direct public employees	15	1.6	9	24	15	9
Indirect private sector jobs from public procurement	6	2	6	12	0	12
Indirect private sector jobs from public construction	2	1.9	2	4	0	4
Total jobs supported by public spending	23		17	40	15	25
Public utilities (mixed public and private)	4	2.5	6	10	2	8
Total jobs supported by public spending and public services	27		23	50	17	33

Source: see note. ⁶²

⁶² The table is constructed as follows. Direct public employees: median from OECD 2008 figure 8; Indirect jobs: using Oxford Economics 2008 estimated ratio of 1.2million jobs supported by £79billion spending, implying a jobs: spending ratio of about half compared with direct labour (5.2million jobs from £160billion spending), and assuming that the ratio of non-service procurement (£67million) is half of that again, so the overall employment effect of 8% of GDP spent on procurement (the OECD estimate 2008) is to support just over one-third of the jobs that would have been supported as direct labour; employment effect of construction spending taken from Scotstat. <http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output/IOAllFiles2004>, implying a higher ratio of about two-thirds the effect of direct employment; public utilities, using an average of the figure estimate of 6% (CEEP, 2010) and the implied ILO 1999 figures of 4% and 2%. Multipliers for direct labour, construction and utilities are weighted averages of Scotstat multipliers for the relevant

Some countries have set up “Employment guarantee” schemes, which guarantee a specified amount of employment to workers who would otherwise be unemployed, usually involving employment on public works or infrastructure. Argentina, for example, in response to its economic crisis in 2000, introduced a scheme guaranteeing 20 hours work a week for a member of households with children under 18. The policy was once used in the USA in the 1930s, supporting up to 10 million people, and the idea has now been re-discovered by mainstream economists, including Atkinson, Stiglitz, Solow and Krugman, who describes it as an “old-fashioned idea but probably a very good one” (Komlos, 2018).

By far the biggest public employment guarantee scheme is in India. An employment guarantee scheme had existed in the state of Maharashtra for many years, and in 2005, against the background of widespread rural poverty, the government of India introduced a national scheme, known as the Mahatma Ghandi National Rural Employment Guarantee (MGNREG). This guarantees 100 days of work to one member of a rural household, on works decided locally as being of value to the community. It thus creates rights which strengthen the bargaining position of rural workers, and is demand driven. The scheme includes requirements for basic employment conditions, including a basic hourly minimum rate, a seven-hour day, a weekly day off, equal wages for equal work, medical and crèche facilities. These formalised rights are otherwise almost unknown to rural agricultural workers.

The scheme provides on average nearly 50 days’ work per year to over 50 million households – the equivalent of nearly half of the total jobs in Italy, France or the UK; 55% of those employed under the scheme were women, 22% from disadvantaged castes, 18% from disadvantaged ethnic groups; the average daily wage paid was 154 Rupees; and most of the works carried out were for water resources, irrigation, and roads. The scheme has had the effect of increasing agricultural wages in general, and rural household incomes have increased significantly as a direct result of income from the scheme, by as much as 15% in Andhra Pradesh, for example. The scheme has a positive impact on labour force participation generally, with an extra-large and significant effect for women (MGNREG, 2016; UNDP, 2010; Papola and Sahu, 2012; Chakraborty and Singh, 2018).

Public spending can also protect employment levels during recessions. In the 2008 crisis, Germany and other countries used short-time working schemes, under which public finance compensates employees who agree to maintain employment levels by reducing working time. The rescues of banks and companies which would otherwise collapse was also partly justified in terms of protecting the jobs of employees (EIRO, 2009). “Fair wages” policies have been applied to public sector contractors for over a century, in order to use the economic activity of public authorities to “create avenues of just and secure employment”. In France, the USA, the UK and other countries, “fair wages” legislation and clauses were introduced, specifying minimum conditions of work and/or the need to recognise rates agreed with trade unions.

The ILO adopted the principle of fair wages clauses in 1949, in Convention 94, which requires states to include clauses in their public contracts ensuring that wages (including allowances), hours of work, and other conditions of labour were not less favourable than those established for work of the same character in the trade or industry in the district where the work is carried out. The ILO encouraged its use in developing countries as a key instrument for establishing formal employment. It also adopted the use of procurement clauses for pursuing equality in

sectors, including induced effects: for procurement, the Oxford Economics 2008 implied multiplier of nearly 2.0 is used.

Recommendation 111, which advocates that commitment to equality principles should be a condition of eligibility for public contracts (ILO, 1949; ILO, 1958; ILO, 2008; McCrudden, 2004).

Box A Greater London Authority responsible procurement policy

The Greater London Authority (GLA) spends over GBP £3billion (USD \$4.8billion) each year on procuring supplies, works and services. It has adopted a comprehensive social procurement policy which includes standard contract conditions on employment issues. The policy is applied not only through contract conditions but through a series of meetings with suppliers and community organisations to ensure the policies are understood and supported.

The GLA's responsible procurement policy consists of seven themes:

- encouraging a diverse base of suppliers;
- promoting fair employment practices;
- promoting workforce welfare;
- addressing strategic labour needs and enabling training;
- community benefits;
- ethical sourcing practices; and
- promoting greater environmental sustainability.

The GLA sets a "London Living Wage" (LLW), significantly above the national minimum wage. In re-tendering its cleaning and catering contracts in 2006, bidders were required to indicate whether they would accept a LLW clause as part of the contract, including ensuring that other employment conditions were not reduced as a result of paying a living wage. It estimates that over 400 workers gained from implementation of the LLW in 2007. The GLA also applies 'supplier diversity requirements' on major contracts, such as the East London rail redevelopment, to ensure that smaller suppliers led by minority ethnic groups, by women and disabled people have received a significant proportion of subcontracts. It also monitors the supply chains of companies, for example suppliers of uniforms, and is piloting the use of a Suppliers Ethical Data Exchange (Sedex) – a system for companies to report labour conditions in all their suppliers factories (GLA, 2016).

3.3 Public goods

The purpose of public spending and public services is to achieve public objectives. These objectives include, for example, ensuring universal education and universal access to healthcare; environmental objectives such as the reduction of greenhouse gas emissions and management of waste; and economic objectives such as full employment. This section illustrates how the public sector has a comparative advantage in delivering three different types of public goods – healthcare; housing; and climate change.

3.3.1 Healthcare

Public spending represents the great majority of health spending in all OECD countries, except the USA (and Mexico). There is good reason for this. The comparative data shows that a healthcare system based on private spending, like the USA, is more expensive, and produces much worse results, than systems based on public finance: "learning health policy

lessons from the United States is rather like taking lessons in seamanship from the crew of the *Titanic*" (Ranade, 2014).

The ineffectiveness of private healthcare spending can be seen in Table 5, which compares the performance of the USA with that of Belgium and Cuba. In all cases, public spending on healthcare is at similar levels, as a proportion of GDP. The USA however also spends over 9% of GDP on private healthcare - the only country in the world with anything like such a level of private healthcare spending. This huge extra spending however appears to deliver no benefit at all – the health outcomes are in fact significantly worse than in either Belgium or, remarkably, Cuba – a much poorer country (OECD, 2013B).

Table 5 Public and private healthcare spending and outcomes in USA, Belgium, Cuba (2011)

	Public spending on healthcare (% of GDP)	Private spending on healthcare (% of GDP)	Life expectancy at birth (2010)	Infant mortality rate (2011)	GNI per capita US\$(2011)
USA	8.29	9.10	78.2	6.4	48450
Belgium	8.17	2.71	79.9	3.5	46160
Cuba	9.72	0.91	79.0	4.5	5460

Sources: OECD, 2013B.

Higher *public* spending on healthcare produces better health outcomes for everyone. But higher *private* spending on healthcare actually seems to have the opposite effect. An analysis of 163 countries found that “an increase in public funds is significantly correlated with a lower infant mortality rate” but “private health care expenditure is associated with higher, not lower, infant mortality rates”. So if private spending on healthcare could be converted into public spending on healthcare, the global annual total number of child deaths could be cut by around 2 million (Tacke and Waldmann, 2011; OECD, 2009; Pearson, 2009; Beraldo et al., 2009).

The delivery of these results is not simply a matter of technical organisational management and micro-economic efficiency. It is also a function of social political processes which can generate a much greater public benefit, of which Sri Lanka provides a good example.

Box B Sri Lanka

The Sri Lankan health system shows the importance of public and political commitment, and the capacity of workers, in the effectiveness of public healthcare. It spends less in absolute and relative terms than comparable countries but achieves better health indicators than some European countries. It does so by providing levels of access to medical services comparable to a developed country.

“All government health services, with few exceptions, are available free to all citizens... from antiretrovirals for HIV/AIDS patients to coronary bypass surgery... Access to health care is treated as a fundamental social right and thus not subject to arbitration... This attitude... has been a critical success factor ... government services continue to be used by and accountable to all in society, including the influential middle classes and urban elite who have

remained political supporters of good quality government services. Furthermore, expansion has not been at the cost of reductions in clinical quality of services, although it has been at the cost of accepting lower consumer quality in amenities. Most of the population has lived within 5 km. of a healthcare facility since the early 1970s, and most of the rural population is within 5–10 km of a peripheral facility” (Rannan-Eliya and Sikurajapathy, 2009).

“The factors explaining this include: a strong public service ethos established in the MOH by the 1950s; strong centralized control of budgets, inputs, and operating procedures, which minimized input prices and constantly forced health workers to meet increasing demand through efficiency savings instead of relying on more resources; and low administrative overheads associated with a civil service run, command-and-control management system.... through internal purchasing controls and investment decisions, the MOH can and does restrict the availability of services it considers too expensive. For example, government hospitals are prohibited from, or limited in, buying individual drugs or certain high-technology equipment” (Rannan-Eliya and Sikurajapathy, 2009; Hsiao et al., 2000).

The problems with private healthcare fall under four broad headings:

1. *Affordability: charges act as economic barriers so the poor cannot afford the care that they need.*

The core problem with private healthcare or education is simply that private providers charge for services, including insurance. As a result, the poor can afford less than the rich. Private healthcare is a much bigger burden on their income, and they can only afford a limited amount of healthcare, regardless of need. So it reduces the amount they have to spend on other things, while failing to provide as much care as they need.

The charts below show these effects In the USA, where private healthcare remains dominant, the poorest households spend 15% of their income on healthcare, while the richest are spending 3% of their income. But they still cannot afford as much private healthcare as the rich – although the healthcare needs of the poor are invariably greater.

Chart G In the USA, the poor spend much more of their money on private healthcare...

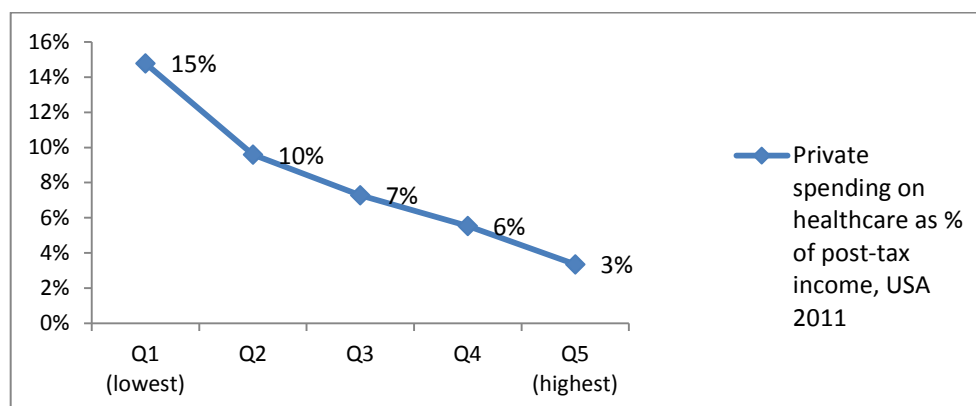
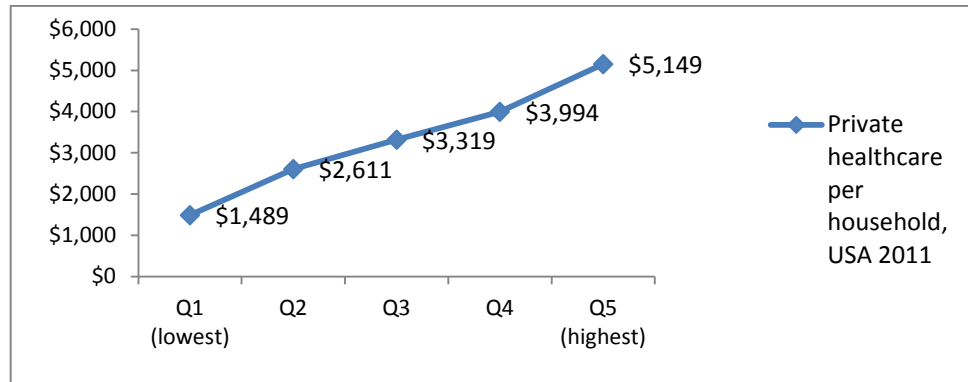


Chart H ...but still cannot afford the same healthcare as the rich



Sources: USA BLS, 2011, and PSIRU calculations.

2. *Catastrophic expenditure: the poor risk being forced into “catastrophic expenditure” by ill-health.*

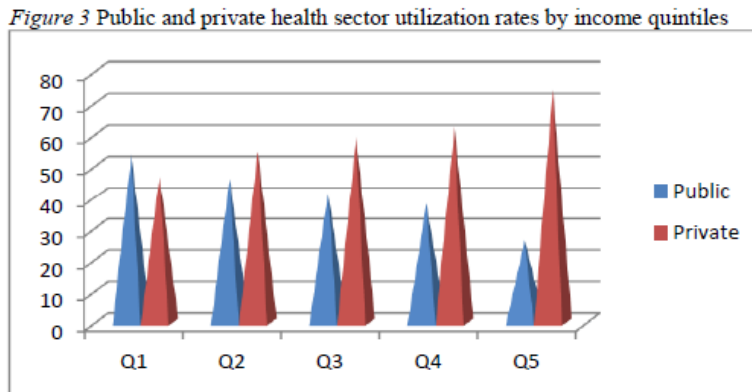
Surveys in eighty nine countries, both low and high income, covering 89% of the world’s population, suggest that 150 million people globally suffer financial catastrophe annually because they have to pay for health services. Countries with higher rates of inequalities between households have higher rates of financial catastrophe (Xu et al, 2007).

3. *Selectivity: private operators target the rich or richer regions.*

Privatizing existing public services also increases inequalities in the distribution of services, as private companies seek those with highest incomes rather than greatest needs. In Tanzania and Chile privatization led to many clinics being built in areas with less need, whereas prior to privatization government clinics had opened in underserved areas and made greater improvements in expanding population coverage of health services. In Chile, changes in demand for healthcare by an ageing population are causing people, previously covered by private healthcare insurance, to return to the public sector. The private healthcare sector is refusing to insure them because of their age and expected higher demand for care (Basu et al., 2012; Murray, 2000; Benson, 2001).

In India, public spending only represents one-fifth of all spending on healthcare, the rest is private spending. There are considerable variations between states in whether the benefits of this system are progressively distributed or not – in some states the poor get more benefit, in other states the better-off. But overall, poorer households rely more on public sector provision, while the private sector is more used by higher-income patients, as shown in the chart below (Chakraborty et al., 2013).

Chart I Utilisation of public and private healthcare in India by rich and poor



Source: Government of India (2005)

Source: Chakraborty et al., 2013.

4. Over-treatment: private companies sell services that are profitable but not needed

In China, private providers are paid on a fee for service basis under health insurance schemes, with below-cost prices for basic care and above-cost prices for higher-tech care, which encourages over-provision of expensive “high-tech” care: for example giving patients treatment which is not strictly necessary, or over-prescribing drugs (Wagstaff et al., 2009; Wagstaff and Lindelow, 2008).

India also shows the problem of providing “targeted” public finance spent on private provision. The Indian government launched a national health insurance scheme for the poor, the RSBY, in 2008, whereby families living below the poverty line can receive treatment worth up to 30,000 rupees (\$550) each year from designated private hospitals, which claim the costs directly from the state. But private clinics have seen this as an opportunity: an extraordinarily high number of women had their uteruses removed by private clinics, for which the clinics could charge more than for less radical treatment (BBC, 2013).

3.3.2. Housing

The importance of public housing can be seen in the origins of the financial crisis of 2008. In the USA, where public housing has been minimal, poorer families had to try to buy homes by taking out mortgages. The banks loosened credit requirements, as they rushed to sign more people to mortgages. Many people could then not afford the payments, and so these ‘sub-prime’ mortgages became bad debts for the banks, a major factor in the banking crisis. The banks responded with repossessions which made hundreds of thousands homeless. If the USA had instead provided public housing at affordable rents, families could have had decent accommodation without such financial stress on themselves and the system. As the UN’s housing expert, Raquel Rolnik, observed:

“The belief that markets will provide adequate housing for all has failed. The current crisis is a stark reminder of this reality... A home is not a commodity – four walls and a roof. It is a place to live in security, peace and dignity, and a right for every human being... Excessive focus on home ownership as the one and single solution to ensure access to housing is part of the problem... adequate housing for all is a public goal whose achievement requires a wide

variety of arrangements.... Markets, even with appropriate regulation, cannot provide adequate housing for all” (Rolnik, 2008).

The provision of public sector housing at affordable rents was one of the major public services in the 20th century in European and other OECD countries. In parallel, non-profit mutual savings banks and building societies enabled the middle classes to buy houses, with encouragement and support from governments. But this system has been undermined by neoliberal policies. From the 1980s, public sector housing was cut back as part of the general reduction in the role of the state, and public housing was sold to private companies, mutual building societies were converted into for-profit banks, with fewer restrictions on their lending policies. A UN conference on housing problems in central and eastern Europe, concluded that: “...the increasing reliance on market forces has not been sufficient to compensate for the decline of the role of the state in the housing sector” (UNECE, 2004).

Housing is a key issue in the rapidly growing cities of developing countries. This problem has been successfully addressed by public housing policies over the last 50 years in Singapore and Hong Kong, two of the most densely populated city states in Asia. In both cities, the programmes were started to deal with the problem of rapidly growing slum settlements, building hundreds of thousands of homes for rent. Public housing was later used to provide middle class housing as well, without rent subsidies. In Singapore, 85% of the population live in public housing, either rented or on a 99-year lease. Policies ensure that estates and new developments include a mix of different racial and social groups. Half the population of Hong Kong – over three million people – live in public housing; two million of them renting. By contrast in Malawi, a 2007 survey found that “Formal housing finance in Malawi is rudimentary ... and less than 16% [are] able to afford a conventional house ... no subsidies are available to the individual” (Singapore, 2010; Hong Kong, 2014; Nyasulu and Cloete, 2007).

Housing is again becoming a major problem in the cities of the developed world. Market forces mean that developers use prime urban land to build accommodation for ownership by the relatively affluent, or as an investment by the global rich. Either way, rents are driven up, and housing becomes unaffordable for many or most urban residents and workers. In developing countries similar processes involve “land-grabs” even in the poorest areas of cities like Karachi: in 2013 Perween Rahman, the director of the Orangi People’s Project, was killed because she insisted in documenting the rights of poor residents of an area targeted for profitable development, and on exposing the groups and politicians behind the land-grabs and the money they were making (Ley, 2017; Rogers and Sin, 2017; Scanlon et al., 2015; Zaman and Ali, 2017)

3.3.3. Environment and energy

The greatest single challenge facing the countries of the world is dealing with climate change. The measures required include switching to renewable energy sources for generating electricity, investing in more energy-efficient industrial processes and more energy-efficient homes, and developing public transport systems to reduce the use of cars. At the same time, over a billion households in Africa and south Asia remain without access to electricity supply.

The global costs of all the measures required to cut carbon emissions by the necessary amount has been estimated at between 1% and 3% of global GDP. The UN estimates that about three-quarters of this will have to come from public finance. These figures mean that

globally, public spending will have to be higher by about 1.5% of total GDP, just to deal with climate change. This process was accelerated by the stimulus packages introduced by governments in 2009 to counter the recession, which included many “green” investment projects, estimated to be worth over \$436billion in total – all from public finance (IMF, 2010B).

The necessity of public finance can be clearly seen in Europe, which introduced a compulsory internal market in electricity in the 1990s, and has more recently adopted targets for renewable energy. But it is now clear that the climate change policies are incompatible with the market rules, because the cheapest options, fossil-fuel plants, must be discouraged in order for renewables to flourish. The UK committee on climate change advised that: “we should not accept the significant risks and costs associated with the current market arrangements... changes to the current arrangements are both required and inevitable.” The UK regulator, OFGEM agreed: “There is an increasing consensus that leaving the present system of market arrangements and other incentives unchanged is not an option” (UK Committee on Climate Change, 2009). An attempt to provide a market solution by creating a carbon trading scheme, the ETS, failed. The IEA summarised: “Market-based, unsubsidised low-carbon investments have been negligible” (IEA, 2016B).

In Germany, a policy of explicit priority for renewable energy has simultaneously encouraged re-municipalisation, and created a large number of small firms and cooperatives, and undermined the dominance of the multinationals. There has been a big revival of municipal electricity companies [*stadtwerke*], not only taking over distribution networks but also expanding into generation of electricity – especially renewables. Municipalities plan to boost their share of electricity production from a tenth to at least a fifth by 2020. Renewable energy as a proportion of electricity generation in Germany grew much faster than anyone expected. By mid- 2013 the share of renewable energy was nearly 25%, with 25,000 wind turbines and 1.3 million solar photovoltaic facilities. Nuclear power stations will be closed completely by 2022. This process is known as the “Energy transformation” [*energiewende*] (Agora, 2013; *Economist*, 2012; *IP Journal*, 2013; Reiter, 2011).

Box A The Munich model

In 2008, Munich city council decided that its municipally owned utility company, Stadtwerke Muenchen (SWM), should plan to generate enough renewable energy in its own plants to supply all of Munich’s private households, subways and trams combined by 2015, and by 2025 enough to supply the entire municipality, including business and commerce. The 2015 target has already been achieved. SWM works with local welfare organisations to provide free energy advice to low-income households. SWM also provides public transport, water, district heating, telecoms and cable services to the whole city.

“Today, energy supply is characterized by oligopolies of private energy suppliers. There is practically no competition on price. The transition to renewable energies is made rather reluctantly. By 2025, our utility company aims to produce so much green energy, that the entire demand of the city can be met. That requires enormous investments around 9 billion euros by 2025 and can only be successful if the long-term goal is sustainable economic success rather than short-term profit maximization... German cities and towns are currently trying to correct the mistakes made in their privatization policies of the past. There are many examples of newly established or revived municipal utility companies, especially for energy and water supply, or of the repurchase of municipal transport services” (Reiter, 2011).

The private sector has also shown it is not a reliable partner for investing in major renewable energy projects in developing countries. Multinational companies have abandoned the two largest renewable energy projects in Africa, Desertec – generating solar power in the Sahara desert - and Grand Inga, a hydro-electric scheme on the Congo River. Development of both these projects now depends on governments and public sector utilities (Euractiv, 2013; CleanTech Blog, 2013).

In addition to developing renewable energy sources, many developing countries have to extend their electricity systems to provide full coverage. In 2010, 1.3 billion people were without access to electricity, the great majority of whom are in sub-saharan Africa and South Asia, and in rural areas, requiring annual investment of \$43billion to deliver universal connection by 2030 (IEA, 2012).

A World Bank study of investment in electricity and other infrastructure in sub-Saharan Africa shows that private companies have provided only about 10% of total investment – and nearly all of that is in power stations with long-term government-guaranteed contracts, not in extensions to the system: Table 5 summarises the data. The great majority of investment comes from public finance, followed by aid from donor countries and development banks: “in most developing countries upfront public investment in developing national and local capacity is the most important ingredient” for attracting any private investment at all – and even then it will only take place “where a commercial return can be reliably earned on the investment” (IEA, 2010; World Bank, 2010). The World Bank report also says that experience shows that a centralised public sector utility delivers much better results in rural electrification than fragmented or privatised approaches:

“countries that have taken a centralized approach to electrification, with the national utility responsible for extending the grid, have been more successful than those that followed decentralized approaches, where a rural electrification agency attempted to recruit multiple utilities or private companies into the electrification campaign” (World Bank/AFD, 2010).

Successful electrification programmes are invariably based on political commitment and public finance, for example in Brazil under the “*luz para todos*” programme.

Table 6 Public investment in electricity in Africa far greater than private

Country group	Investment (\$ billions)				Operational expenditure (\$ billions)	Total investment and operational	Public sector as % of total
	Public sector	Aid	Private sector	Total			
Total sub-saharan Africa	2.4	1.8	0.5	4.6	7.0	11.6	81%
<i>of which:</i>							
1. Resource-rich countries	1.2	0.8	0.3	2.3	1.6	3.9	72%
2. Middle income countries	0.8	0.03	0.01	0.8	2.7	3.5	99%
3. Low-income countries	0.4	0.9	0.2	1.6	2.6	4.0	75%

Source: World Bank/AFD 2010.

Box B Aggreko: private companies exploiting failure

Many countries facing power shortages have leased diesel generators. It is estimated that temporary emergency generators currently account for about 750 MW of capacity in Sub-Saharan Africa. Not only are temporary power solutions expensive, but because they use diesel, they are also a high carbon option. They do not provide a long-term solution by developing local capacity. They are also extremely noisy for local residents. The procurement processes for temporary power have also resulted in corruption and bribery problems: the Tanzanian Prime Minister and Energy Minister were forced to resign in February 2008 (Eberhard et al 2011). But private companies make good business from this failure to develop either a universal system or renewable energy. The biggest beneficiary is the UK-based multinational, Aggreko, with annual sales of £1.6billion (USD \$2.6 billion) and nearly 6GW of generating capacity, whose business plan is based explicitly on a continuing failure to extend the connections and generating capacity of utilities in developing country:

“In our core market, which we define as non-OECD countries excluding China, we estimate that the shortfall [in generating capacity] will increase 9-fold, from 22GW to 195GW. We are confident that such a level of power shortage will drive powerful growth [for Aggreko] over the medium and long term in demand for temporary power as countries struggle to keep the lights on.”

Aggreko is not just a passive beneficiary of this failure. It actively encourages governments to accept this failure, and rely instead on its diesel plants: “our own activities serve to create market demand – Bangladesh and Indonesia did not figure highly in our estimates of market size a few years ago, but they are now important customers as a result of our sales efforts” (Aggreko, 2012).

4. Conclusion: the politics of public spending and public services

This article has reviewed the evidence of the economic role of public spending and public services, in terms of efficiency at micro level, and in terms of the macro effects on growth, employment, and the delivery of public goods. The results undermine the assumptions of mainstream economists and policy makers.

Contrary to the expectations of neo-classical theorists, the empirical evidence does not show that private sector companies operate more efficiently than public sector organisations. Despite this, international institutions and national governments continue to follow policies of outsourcing, privatisation and PPPs. The economic cost is borne by the public in terms of higher cost of capital and higher transaction costs, which at the same time represent substantial gains for the financial and banking sectors.

The same is true for macro effects. Contrary to the policy prescriptions of the IMF, World Bank, European Commission and others, the increasing relative economic role of public spending is linked with higher GDP, supports a large proportion of formal employment, and is central to delivering key public goods. The 2008-09 recession was in no way caused by public spending – indeed, it is possible that one key factor behind the economic crisis was the attempt to replace the economic engine of public spending with a financial bubble, which failed. Its effects were however dampened by a substantial global increase in public spending,

yet since then the policies of international institutions and many national governments have followed the political ideologies which call for reductions in the role of the public sector.

Global public spending, and the relative importance of the public economy, is nevertheless likely to rise well above existing levels, for clear reasons, which have been identified and quantified by the IMF:

- Growth and economic development in middle and lower income countries.
- The need to deal with climate change, which adds about 1.5% of GDP to public spending levels.
- The needs of ageing populations for pensions and healthcare (an extra 4.5% of GDP).
- The need to restore economic growth and reduce unemployment

The international institutions, however, have followed the old cold war theorists in seeing these trends as a threat rather than an indicator of needs. In 2010, the IMF set targets of cutting public spending in high income countries by a quarter, from 36% of GDP to 27% of GDP, and cutting public spending in developing countries by one tenth, from 25% to 22% of GDP: these targets to be achieved by 2030 (IMF, 2010A).

Market mechanisms do not deliver the level of public services which countries need. The decisions which drive the development of public spending, or the imposition of austerity, are the outcome of political processes at national and international level. The creation of welfare states and the development of public services were associated with the election of social democrat governments and the independence of developing countries, both supported by strong trade unions. The attempt to halt this trend was also political, led by the Thatcher, Reagan and Pinochet governments in the UK, USA and Chile respectively, and by the adoption and promotion of these policies by the IMF, World Bank and the European Union.

The same conflicts are continuing in the 21st century. The economic outcomes depend on the outcome of the political contests between the international institutions and their conservative allies, and the movements and parties insisting that public spending should be “driven by collectively determined public need” (Sekera, 2016), defined by democratic decisions on economic, social and environmental objectives.

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Bureaucracy shouldn't be a dirty word: the role of people-responsive bureaucracy in a robust public economy

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Abstract

Bureaucracy, government, and practically all things “public” are under enormous siege in the age of Trump. This comes at an already perilous moment. Over the past several decades, government reform, privatization, checklist-type “accountability,” and digitization, among other developments, have reorganized governance in a way that has weakened public institutions, apparently making them less responsive to the people they are supposed to serve. The status quo may well be connected to the collapse of public trust; wholesale disaffection is surely a key reason that voters have elected the likes of Trump and counterparts elsewhere. Now at the helm, Trump is further attacking the already weakened pillars of democratic society.

To help remedy this state of affairs, the “public” must come back as a virtue. Establishing a vibrant public economy relies on a well-functioning bureaucracy that truly serves people. We need to reconsider developments such as the outsourcing of government functions and the prevailing checklist approach to accountability. True accountability cannot be reduced to metrics that are poorly conceived, encourage appearances over truth, obscure the broader picture, and are severed from larger institutional knowledge and public trust.

A robust public economy is needed to help restore public trust. No democratic society can survive indefinitely without it.

Bureaucracy has been a dirty word for perhaps half a century. It conjures up government inefficiency and waste, and, yes, bureaucrats, those dull paper-pushers whose very beings supposedly resist entrepreneurial spirit and innovative ideas. Even the serious study of bureaucracy is passé. Try tracking down a college course or even graduate seminar on the subject; courses about organizations are many, those on bureaucracy, few and far between. Yet bureaucracy is a crucial component of any modern state, as well as any corporation.⁶³

A public economy depends on bureaucracy that serves people. But over the past several decades, developments that include government “reform,” contracting out, check-list type “accountability,” and digitization have transformed bureaucracy as we once knew it. Over the same period, people have lost faith in public institutions. This article asks whether bureaucracy, in the form emergent in both the state and private spheres, disempowers regular people and hence has served to undermine public trust. Establishing a robust public economy requires understanding how bureaucracy has changed, how it now works in practice, and how these workings affect people and their trust in institutions. It requires acting to remedy any shortcomings to make bureaucracy more responsive.

⁶³ Max Weber, a seminal theorist on bureaucracy, dealt with bureaucracy in both government and private enterprise. For instance, he wrote: “The management of the modern office is based upon written documents (‘the files’), which are preserved in their original or draft form. There is, therefore, a staff of subaltern officials and scribes of all sorts. The body of officials actively engaged in a ‘public’ office, along with the respective apparatus of material implements and the files, makes up a ‘bureau.’ In private enterprise, ‘the bureau’ is often called ‘the office’” (Max Weber, “Bureaucracy,” Hans H. Gerth and C. Wright Mills, eds., *From Max Weber*. New York: Oxford University Press, 1946, p. 197).

Bureaucracy, democracy, and politicization

What is the role of bureaucracy in society? Bureaucracy, in some form or another, has long been part of virtually every formal institution and organization, let alone entities like states encompassing thousands of organizations. As anthropologist Michael R. Brown explains:⁶⁴

[O]nce human societies are aggregated in units of great complexity and geographic breadth, there is little evidence that people can live without some degree of bureaucratic control. It can be administered according to a system of patronage marked by nepotism and arbitrary decision making, or it can aspire to a technorational proceduralism justified by a discourse of fairness. The latter, of course, has come to prevail in democratic societies.

Attempts to create bureaucracy befitting democratic ideals can be traced to early modern Europe, which, as anthropologist Keith Hart details, “sought to devise public institutions whose benefits were guaranteed equally to all, regardless of who they were or whom they knew. These bureaucracies aimed at a new kind of universal democracy.”⁶⁵

It wasn’t until the beginning of the 20th century that such depersonalized bureaucracy was thoroughly explicated: German sociologist Max Weber famously outlined a system of “rational-legal” authority – in contrast to “traditional” authority embedded in convention or “charismatic” authority emanating from the personal qualities of a leader. A-political and grounded in law and objective reason, rational-legal authority has the common good as its validation. Weber’s bureaucracy is *legal* – it follows the rule of law; *rational* – the organization has goals that it attempts to realize; and *impersonal* – a client’s ability to achieve a goal doesn’t depend on his or her personal relationship with a bureaucrat. Impersonal principles and formal procedures govern.⁶⁶

The esteemed sociologist was, of course, charting the *ideal* organization. Bureaucracy in the real world often falls short; a disjuncture looms between its prescribed principles and actual practices, as studies the world over show.⁶⁷ Moreover, if followed in letter and spirit, some scholars argue, bureaucracy would produce an organization with self-paralyzing routines.⁶⁸

⁶⁴ Michael R. Brown, “A Tale of Three Buildings: Certifying Virtue in the New Moral Economy,” *American Ethnologist*, Vol. 37, No. 4, 2010, p. 749.

⁶⁵ Keith Hart, “Formal Bureaucracy and the Emergent Forms of the Informal Economy,” *Research Paper No. 2005/11*, EGDI and UNU-WIDER 2005, p. 4. See also Ali Farazmand, “Bureaucracy and Democracy: A Theoretical Analysis,” *Public Organization Review*, September 2010, Vol. 10, Issue 3, pp. 245-258.

⁶⁶ Max Weber, *Economy and Society: An Outline of Interpretive Sociology* (Volumes 1-2), Guenther Roth and Claus Wittich, eds., University of California Press, 1978. (See also Max Weber, Max Weber, “Bureaucracy,” Hans H. Gerth and C. Wright Mills, eds., *From Max Weber*. New York: Oxford University Press, 1946; and Susan J. Hekman, “Weber’s Ideal Type: A Contemporary Reassessment,” *Polity*, Vol. 16, No. 1, 1983, pp. 119–37.)

⁶⁷ See, for example, Don Handelman, *Models and Mirrors: Toward an Anthropology of Public Events*, New York and Oxford: Berghahn Books, 1998; Michael Herzfeld, *Cultural Intimacy: Social Poetics in the Nation-State*, New York and London: Routledge, 2005; and Philip Parnell, “The Composite State,” *Ethnography in Unstable Places: Everyday Lives in Contexts of Dramatic Political Change*, Carol J. Greenhouse, Elizabeth Mertz, and Kay B. Warren, eds. Durham and London: Duke University Press, 2002.

⁶⁸ The existence of formal, impersonal structures does not imply a lack of personal networks or personalized relationships. As governance scholar Hugh Hecló wrote in 1977, “life at the top of the government bureaucracy is far different from the strict procedures, written orders, and rigid hierarchies generally associated with the term ‘bureaucracy’” (Hugh Hecló, *A Government of Strangers: Executive Politics in Washington*, Washington, DC: The Brookings Institution, 1977, p. 2).

The annals of democratic society (leaving completely aside, say, authoritarian or fascist regimes) are replete with examples – both big and small – of bureaucracy being bypassed, personalized, or influenced for political reasons.

First, there are perennial politics within and among bureaucracies over who gets what in a larger organizational universe, whether governmental or corporate. Bargaining among elite government actors, most especially government agencies whose representatives compete with each other for budgetary and personnel allocations, is the bread and butter of political scientists and public policy analysts who study “bureaucratic politics.” Their works show that, instead of advancing public or national interests, officials often pursue policies that advantage their organizations (or units therein).

But what should be much more concerning to the future of democratic governance is what appears to be a trend over the past few decades, at least in the United States: government officials bypassing bureaucracy or undermining its impartiality by eschewing standard procedures. This activity appears to be on the rise. Consider these examples from different U.S. administrations of different political stripes.

In the Iran-Contra affair of the 1980s under President Ronald Reagan, rogue officials created alternative governance structures and processes to circumvent standard bureaucracy, as well as the checks and balances of Congress, which had outlawed their activity. Simultaneously they also enjoyed the tacit approval of President Reagan, who had secretly blessed the operations. These structures and processes, although substantially embedded within governmental bodies and often carried out by officials, were off the books: They skirted bureaucratic and chain-of-command structures and enabled the players to carry out illegal operations in secret, thereby derailing official U.S. foreign policy.⁶⁹

A decade later major decisions that would greatly adversely affect the world economy also eschewed formal procedure in favor of informality. During the late 1990s Clinton administration, members of a long-standing informal power clique around Treasury Secretary Robert Rubin excluded officials from decision making who would be included if official position, rather than membership in the clique, were their guiding principle. At the same time, they brought in others from outside government who were part of their network: clique members who were top bankers, the very people whose activities were supposedly being regulated. With key members in U.S. finance posts and others on Wall Street, the Rubin clique excluded from participation in decision making Brooksley Born, chair of the Commodity Futures Trading Commission. One might expect that a CFTC chair could exercise some formal power. But Born stood well outside the Rubin clique, whose members sought to avoid regulation of an exotic derivative that she thought was dangerous.⁷⁰ The clique prevailed.⁷¹ Its advocacy of unregulated derivatives and the 1999 repeal of the Glass-Steagall Act bear

⁶⁹ See analysis and sources in Janine R. Wedel, *Shadow Elite: How the World's New Power Brokers Undermine Democracy, Government, and the Free Market*, New York, NY: Basic Books, 2009, pp. 161-165.

⁷⁰ E.g., Manuel Roig-Franzia, “Brooksley Born, the Cassandra of the Derivatives Crisis,” *Washington Post*, May 26, 2009, www.washingtonpost.com/wp-dyn/content/article/2009/05/25/AR2009052502108.html.

⁷¹ See analysis and sources in Janine R. Wedel, *Unaccountable: How the Establishment Corrupted Our Finances, Freedom and Politics and Created an Outsider Class*. New York, NY: Pegasus Books, pp. 18-19 and 64-68.

significant responsibility for the 2008 financial crisis.⁷² Born soon left public service while clique members continued to amass roles of influence that included lucrative stints at banks and hedge funds.

In the subsequent George W. Bush administration of the early 2000s, yet another episode of bureaucratic and procedural circumvention unfolded at the behest of the dozen or so members of the “Neocon Core” and their allies who helped take the United States to war in Iraq. They did so substantially by thwarting bureaucratic and professional authority, creating within government personalized practices and network-based structures while circumventing standard ones and marginalizing officials who were not part of their network. Neocon Core members in government duplicated job descriptions of existing government units, setting up their own units manned largely with loyalist allies and creating intelligence (supposedly) showing, for example, that Saddam Hussein possessed weapons of mass destruction. They operated through a cross-agency clique; in fact, the U.S. decision to go to war in Iraq was made outside the usual interagency processes, according to a host of insiders in key agencies, including the Pentagon and the Department of State.⁷³

These cases of bureaucracy-busting policy making seem to be part of a general trend of sidelining, personalizing, and informalizing bureaucracy. The increasing exposure of civil servants to politicization and the filling of positions with political appointees previously held by civil servants are part of the trend. The rules that had governed civil servants for the better part of a century came under attack at the beginning of the 21st century. After 9/11, for instance, President George W. Bush relaxed the application of long-standing civil service rules in the Departments of Defense and Homeland Security on a limited basis and slated other departments to follow suit.⁷⁴ The work of civil servants may have become more open to network- and politics-influenced decision making. According to Paul Light, who studies the presidential appointment process, a “thickening” occurred under the Bush administration in which political appointees filled more management layers in government. One related practice

⁷² See, for instance, Gretchen Morgenson, “3,000 Pages of Financial Reform, but Still Not Enough,” *New York Times*, May 29, 2010, <http://www.nytimes.com/mutex.gmu.edu/2010/05/30/business/30gret.html>.

⁷³ See analysis and sources in Janine R. Wedel, *Shadow Elite: How the World's New Power Brokers Undermine Democracy, Government, and the Free Market*, New York, NY: Basic Books, 2009, pp. 169-187.

⁷⁴ The Bush administration proposed new pay and personnel rules pertaining to how employees are compensated, hired, promoted, and disciplined for the 850,000 civil servants in the departments of Defense and Homeland Security, which account for almost half of the federal workforce (Stephen Barr, “It Could Be Auld Lang Syne For Annual Pay Raises,” *Washington Post*, January 1, 2006, p. C02, http://www.washingtonpost.com/wp-dyn/content/article/2005/12/31/AR2005123100867_pf.html). Unions in both departments contested aspects of the new rules (Stephen Barr and Christopher Lee, “Director of Civil Service Resigns: James Oversaw Key Rule Changes,” *Washington Post*, January 11, 2005, p. A13, <http://www.washingtonpost.com/wp-dyn/articles/A63283-2005Jan10.html>). In the end, these rules were put into effect on a limited basis only: for a fraction of the DOD workforce and for a short time for the DHS workforce (author’s conversation with John Threlkeld, AFGE Legislative Representative, American Federation of Government Employees, March 19, 2008).

The Bush Administration proposed to extend the Defense and Homeland Security pay-for-performance systems to a much larger portion of federal employees through the “Working for America Act,” which was to do away with the General Schedule by 2010 (Stephen Barr, “Labor Keeps Its Guard Up Against Efforts to Change Workplace Rules,” *Washington Post*, November 8, 2005, p. B02, <http://www.washingtonpost.com/wp-dyn/content/article/2005/11/07/AR2005110701401.html>, and Karen Rutzkik, “Administration Continues Quest to Tie Pay to Performance Across Government,” *Government Executive*, July 19, 2005, <http://www.govexec.com/dailyfed/0705/071905r1.htm>). In 2006 the General Schedule applied to some 1.8 million federal employees (Barr, “It Could Be Auld Lang Syne”). However, some of the pay-for performance standards for Defense and Homeland Security were struck down in U.S. District Court. (See <http://www.govexec.com/dailyfed/0805/081705r1.htm>.)

for federal employees, says Light, was “very tight coordination from the White House on down to the political appointees.”⁷⁵

President Donald Trump, of course, has exploded the politicization of bureaucracy through all-out attacks on government, bureaucracy, and the civil service. He has appointed cabinet members who have been openly hostile to the agencies they have been tapped to run. Their loyalty appears to flow more to the industries from whence they come (and to Trump) than to the missions of their agencies and their roles as public servant. Trump attempted to reorganize the National Security Council to include, for the first time, a political strategist, until that strategist, Stephen Bannon, was ousted four months later.⁷⁶ Perhaps most important is what Trump has *not* done, namely, fill hundreds of important, vacant roles.⁷⁷ The State Department in particular has been the scene of massive layoffs and brain drain.⁷⁸ All this, of course, serves to expand executive power, which helps to further concentrate information, resources, and decision making.

Government, redesigned

Some of these trends have been influenced, exacerbated, or even powered by the raft of governments reforms that began in the 1980s.

The vision of a streamlined state burst onto the public stage in the United States and the United Kingdom in the early 1980s, with Ronald Reagan and his ideological soul mate, Margaret Thatcher, leading the rhetorical charge. Streamlining the state is part of a grab bag of ideas and policies often referred to as “neoliberalism,” a term I employ sparingly because it can describe considerably different policies, with even more diverse local adaptations to them.⁷⁹

While classical liberal philosophy (harking back to the Enlightenment) sought to safeguard individual rights from state power, protect private property, and enshrine *laissez-faire* economics, neoliberal policies of the past nearly four decades emphasize modest-size

⁷⁵ Light is quoted in Stephen Barr, “Appointees Everywhere, But Try to Count Them,” *Washington Post*, Sunday, October 17, 2004, p. C2, <http://www.washingtonpost.com/wp-dyn/articles/A38874-2004Oct16.html>.

⁷⁶ See, for example, Kelly Magsamen, “What Trump’s Reshuffling of the National Security Council Means,” *The Atlantic*, January 30, 2017, <https://www.theatlantic.com/politics/archive/2017/01/the-trump-national-security-council-an-analysis/514910/>.

⁷⁷ See, for instance, Brian Naylor, “Trump Administration Has More than 250 Unfilled Jobs,” *All Things Considered*, NPR, November 22, 2017, <https://www.npr.org/2017/11/22/566098660/trump-administration-has-more-than-250-unfilled-jobs>.

⁷⁸ Gardiner Harris, “Diplomats Sound the Alarm as They are Pushed Out in Doves,” *The New York Times*, November 24, 2017, <https://www.nytimes.com/2017/11/24/us/politics/state-department-tillerson.html>.

⁷⁹ Geographer Wendy Larner notes that “neoliberalism” is used to describe vastly different political projects across the global North and South – from welfare state restructuring to structural adjustment programs. Larner observes that “neoliberalism doesn’t necessarily travel in the directions we assume, take on the forms we expect, or have the consequences we expect.” She clarifies that, while neoliberalism should not be confused with “neoconservatism” (a movement that began in the United States roughly five decades ago), neoliberal and neoconservative concepts are sometimes intertwined. See Wendy Larner, “Situating Neoliberalism: Geographics of a Contested Concept,” presented at the workshop on “Transnational Governmentality in South East Europe: Translating Neo-Liberalism on the Sovereign Frontier,” Rabac, Croatia, cosponsored by the Institute of Economics, Zagreb, Croatia, and the Friedrich Ebert Stiftung, June 1, 2007. See also Waughan Higgins and Wendy Larner, “Introduction,” Waughan Higgins and Wendy Larner, eds., *Assembling Neoliberalism: Experts, Practices, Subjects*, New York, NY: Palgrave MacMillan, 2017.

government, minimal restrictions on business, and “free” markets. Thus Reagan campaigned against “big government” and presided over an age of deregulation, relaxing constraints on industry, while Thatcher pressed to privatize the economy by selling government-owned enterprises. The redesign of government had its origins in these policy reforms (especially those dealing with government itself), as well as in expanded executive power, which often was necessary to implement neoliberal reform.

There can be good reason for the redesign of government. When unbending bureaucracies prove exasperating, there are calls in democratic society for flexibility to make them more user friendly. David Osborne and Ted Gaebler, authors of the influential *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*, published in 1992, criticized governments for their “sluggish, centralized bureaucracies, their preoccupations with rules and regulations, and their hierarchical chains of command.”⁸⁰ These ideas resonated; *Reinventing Government* became a best seller, despite its dry case studies that largely treat state and local governments. The authors gave new voice to a prevalent critique of government that had been expressed before in various incarnations and that would hasten the redesign of government. With their roots in the Anglo-Saxon world, neoliberal ideas and policies would travel the globe in varying constellations.

Modeling government after business: Efforts to limit the size of government, replete with attempts to make government more like business and to enlist private actors in its work, implicitly challenged the model of bureaucracy elucidated by Weber – one with clear distinctions between the state and private sectors and regulated through professional administration, that is, formal, impersonal structures rather than personalistic ones. Neoliberal policies, first implemented in Anglo-Saxon contexts that comported more to Weber’s model (with all models, of course, encountering challenges when they butt up against reality), were hardly friendly to it. Neoliberalism helped occasion a breakdown of the distinction between state and private, bureaucracy and market.

A brief sketch of the trajectory of neoliberal reform sheds light on this breakdown – as the wellspring of today’s redesign of government – and its results. The “Reagan revolution” sanctified the practice of contracting out government services, ostensibly to control costs while letting governing entities concentrate on their central mission. (The United States was already a pioneer in contracting out, with the Manhattan Project of World War II and Project RAND, established in 1946, among the templates.) As well, enlisting nongovernmental actors and forging collaborative relations with private entities (as in public-private partnerships) would make government more responsive and efficient. Again, the United States, with its history of private bodies building railroads, universities, and civic institutions, took the lead.⁸¹

Business was the model for government. In 1976, Ronald Reagan, while running for president, foresaw the ideal state as one in which “modern business practices could make

⁸⁰ David Osborne and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, Reading, MA: Addison Wesley, 1992, pp. 11–12.

⁸¹ With regard to the goals of contracting out, see Dan Guttman, “Contracting, an American Way of Governance: Post 9/11 Constitutional Choices,” Thomas H. Stanton, ed., *Meeting the Challenge of 9/11: Blueprints for More Effective Government*, Armonk, NY: M. E. Sharpe Publishers, 2006, p. 230. With regard to the participation of nongovernmental actors in governance, see, for example, Lester M. Salamon, *The New Governance: Getting Beyond the Right Answer to the Wrong Question in Public Sector Reform*, School of Policy Studies, Queen’s University: The J. Douglas Gibson Lecture, delivered February 3, 2005, p. 5.

government more efficient, economical, and responsive.”⁸² The New Public Management, which gained currency in the 1980s, sought to apply business principles such as competition and an emphasis on outcomes to government. Heading up President Clinton’s “reinventing government” initiative in the 1990s, Vice President Al Gore echoed the point: “We need to adopt the very best management techniques from the private sector to create governments that are fully prepared for the Information Age.”⁸³ An example is his promised civil service reform, “based on an insight that is common in private industry: you pay for performance.” (Of course, that maxim has not been applied equally. Many CEOs are not paid for performance but paid *whatever* their performance.) The injection of business principles into government was reflected in the language: Recipients of state services become “customers” and citizens “shareholders,” while hierarchy gives way to “participation” and “teamwork,” and rule-driven to “mission-driven” government.⁸⁴

However reasonable these reforms may sound, the fact is that making government more like business constituted a full-frontal challenge (without necessarily declaring it), to the qualities of government and business, in which government operated for the public good and was accountable to the public, and business, ostensibly based on competition, made money. Imbuing government with the character of business could not help but unsettle the accountability frameworks that depended on the clear demarcations that had evolved within many modern democratic states. Graham Scott, the treasury secretary of New Zealand who implemented sweeping “performance-based management” reforms there beginning in the 1980s and an astute student of government reform, was emphatic on this point. “The complexity and networks [brought about by the management reforms] create the demands for old-fashioned accountability... More than ever, we must be vigilant,” he told me.⁸⁵

Whatever the benefits of these reforms, they introduced challenges of accountability – that of the state to its citizenry. Just one challenge was that of the complexity injected into governance via the increase in entities and actors involved and not subject to the same rules as government employees.

Another series of accountability challenges arose with several pervasive long-standing narratives that work to mask ground-level realities of neoliberal reform. In the United States, for instance, the practice of railing against “big government” appears to have led to the creation of still bigger government – and of a less accountable sort. That is because, while federal government was officially being contained in size – as measured in terms of civil servants and others employed directly by government – “shadow government” was getting ever bigger. The 1976 book *The Shadow Government*, published five years before Reagan took office, details the vast off-the-books government workforce already entrenched. Since then, shadow government has done nothing but grow. Its ranks include all manner of consultants, companies, and NGOs, not to mention entire bastions of outsourcing – neighborhoods whose high-rises house an army of contractors and “Beltway Bandits.”

⁸² Ronald Reagan, “To Restore America,” March 31, 1976, http://reagan2020.us/speeches/To_Restore_America.asp, accessed June 24, 2006.

⁸³ Al Gore, “Remarks by Vice President Al Gore, Opening Session of International REGO Conference,” International Reinventing Government Conference, January 14, 1999, <http://clinton2.nara.gov/WH/EOP/OVP/speeches/interego.html>, accessed April 14, 2007.

⁸⁴ The ideas about injecting business principles into government are set out in David Osborne and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*, Reading, MA: Addison Wesley, 1992. Berating bureaucracy is a crucial component here. David Osborne even wrote a book (with Peter Plastrik) titled *Banishing Bureaucracy: The Five Strategies for Reinventing Government*, Reading, MA: Addison-Wesley Publishing Company, Inc., 1997.

⁸⁵ Author’s interview with Graham Scott, December 10, 2006.

Consulting firms and quasi-official bodies (such as government advisory boards) daily stand in for government. In 2015 Paul Light, who studies the size of the federal workforce, found a ratio of 1.81 federal contract workers to 1 federal employee, or almost two contract workers for each government employee (based on an estimated 3,702,000 contract workers to 2,042,000 government employees).⁸⁶ Largely out of sight except to Washington-area dwellers, contractors and the companies they work for seldom appear in government directories. Rarely are they dragged before congressional committees for hostile questioning. They function with less visibility and scrutiny than government employees would face. Most important, they are not counted as government employees, and so the fiction of limited government can be upheld, while the reality is that of an expanding sprawl of entities that are the government in practice.⁸⁷

Alongside the narrative of limited government is the idea that government remains in control and accountable even when transferring its functions and legitimacy to the private sector. Officially, only government officials carry out “inherently governmental” functions – the government’s term for work that only federal employees should do; they also monitor the contracting process and ensure the quality of work performed by contractors. Yet investigations of on-the-ground operations indicate otherwise. Contractors today run intelligence operations, choose and oversee other contractors, and draft official documents, often with little or no oversight from actual government employees.⁸⁸ In such arrangements, new forms of governance are created. Yet the facade of a government in control and accountable prevails.

Neutrality is another narrative that accompanies neoliberal-inspired changes nearly everywhere they are implemented. Deregulation and the privatization of state-owned enterprises and services, which became standard international development fare in the 1980s, are presented as technical projects, designed to achieve greater efficiency. The public face of these policies – the legions of fly-in, fly-out economists, accountants, and planners – reinforce that narrative. Clad in the personality and language of efficiency, neoliberal

⁸⁶ Light, Paul C., “The Government Industrial Complex, 1984-2015,” online draft book chapter, 2016, <http://media.npr.org/assets/news/2016/11/light.pdf>.

⁸⁷ Daniel Guttman and Barry Willner, *The Shadow Government: The Government’s Multi-Billion-Dollar Giveaway of Its Decision-Making Powers to Private Management Consultants, “Experts,” and Think Tanks*, New York, NY: Pantheon, 1976.

⁸⁸ For evidence regarding the outsourcing of inherently governmental functions and dearth of oversight from actual government officials, see Paul R. Verkuil, *Outsourcing Sovereignty: Why Privatization of Government Functions Threatens Democracy and What We Can Do About It*. Cambridge: Cambridge University Press, 2007; Janine R. Wedel, *Shadow Elite: How the World’s New Power Brokers Undermine Democracy, Government, and the Free Market*, New York, NY: Basic Books, 2009, pp. 161-165; and Janine R. Wedel, “Federalist No. 70: Where Does the Public Service Begin and End?” *Public Administration Review*, December 2011, p. S118-S127. Regarding contractors conducting inherently government in military and intelligence arenas, see, for instance, <https://www.govexec.com/oversight/2011/01/gao-army-contractors-performing-inherently-governmental-functions/33120/>; <https://www.nytimes.com/2008/06/15/business/15shelf.html>; and https://cybercemetery.unt.edu/archive/cwc/20110929215927/http://www.wartimecontracting.gov/docs/hearing2010-06-18_transcript.pdf.

Legal scholar and governance expert Dan Guttman wrote 30 years after coauthoring *The Shadow Government*: “The evidence that the official workforce can no longer be presumed to have capacity to account has long gone well beyond anecdote; red flags counseling due diligence are omnipresent; they include high level official admissions of systematic deficiency, years of Government Accountability Office findings of agency-wide deficiencies, and continuing failures of third party oversight in sensitive and showcased programs.” Dan Guttman, “Contracting, an American Way of Governance: Post 9/11 Constitutional Choices,” Thomas H. Stanton, ed., *Meeting the Challenge of 9/11: Blueprints for More Effective Government*, Armonk, NY: M. E. Sharpe Publishers, 2006, p. 231.

principles, spun off in various forms, have circled the globe, with the international financial institutions as frequent sponsors and sometimes local economists trained in elite American schools playing leading roles, such as ministers of finance or the economy.

Yet where neoliberal policies took hold outside the Anglo-Saxon world – and they did not always do so – the charade of neutrality is often unmasked. Privatization and deregulation are, at their core, ideological, value-laden endeavors that stimulated reorganizing, and often came on the heels of unpopular macroeconomic restructuring at the behest of the international financial institutions. Whatever their economic rationale and results, and however democracy-challenged the countries into which the policies were introduced already were, these policies did not tend to mesh well with the encouragement of checks and balances, state-private demarcation, or democratic participation. Moreover, implementing privatization and deregulation often required an expanding executive – backed, of course, by the power of the relevant international financial institutions – that crowded out checks and balances offered by legislatures and courts. Thus, privatization and deregulation restructured governance and power and were hardly neutral.⁸⁹

Further challenging these three neoliberal narratives is another staple of the neoliberal policy sweep – the establishment of nongovernmental bodies that carry out government functions. Such bodies have the potential to create the ultimate flex-friendly environment, in which nimble opportunists flex boundaries to pursue self-interested agendas with impunity. Initiated by international development agencies, these hybrid entities – variously called “quasi-government organizations,” “para-governmental organizations,” “parastatals,” and state-created “NGOs” (all with somewhat different meanings) – might recall the quasi-nongovernmental organizations of the United States and the UK (sometimes called “quangos”) that are outside the civil service but funded by the state. But there are differences. Supposedly set up to bypass bureaucratized government, these bodies are sometimes endowed with more authority than the relevant government agencies and enable private players to create and carry out government functions. Whatever efficiency might come from such arrangements, they inspire flex activity because the players who empower them can avail themselves of the best of both worlds – the authority and ability to allocate resources of the state, combined with the profits of the private sector – while weaseling out of both accountability to the state and private sector competition. Such arrangements put the lie to the neoliberal narratives and lend themselves to governance via fusions of state and private power or simply to its privatization.⁹⁰

The collapse of communism on the heels of this wide deployment of neoliberal ideas suddenly presented a vast new expanse for the employment of neoliberal narratives and policies in the 1990s. Not surprisingly, many a privatization adviser sent by an international development institution or Big Six accounting firm hailed from the United States or the United

⁸⁹ The neoliberal ethos holds that handing government functions to nongovernmental entities merely improves management (or, in the case of NGOs delivering services, responsiveness and citizens’ participation). On NGOs and citizens’ participation, see, for instance, Jennifer R. Wolch’s *The Shadow State: Government and Voluntary Sector in Transition*, New York, NY: The Foundation Center, 1990, in which she argues that state-sponsored voluntary organizations comprise a “shadow state.”

⁹⁰ The concept of “quasi-nongovernmental organization” was coined by Alan Pifer in 1967. Alan Pifer, “Letter: On Quasi-Public Organizations; Whence Came the Quango, and Why,” *New York Times*, September 5, 1987,

<http://query.nytimes.com/gst/fullpage.html?res=9B0DE2D61030F936A3575AC0A961948260>.

Ian Thynne and Roger Wettenhall investigate the nature and diversity of privatization activities and observe a range of state-private mixes. See, for instance, Roger Wettenhall and Ian Thynne, *The Asia Pacific Journal of Public Administration* 27, No. 2, December 2005, pp. 111–116.

Kingdom and pushed many of the same reforms as elsewhere, this time into overbureaucratized, inflexible command systems that had lost their command. Rather than helping construct effective state apparatuses, the state was often berated and bureaucracy bypassed by creating quasi-governmental entities to go around government while doing its work.⁹¹ As the movement advanced with little resistance, privatization exploded around the globe; by 1998, its rate was practically doubling every year.⁹² There was power in positive thinking. As political scientists Harvey Feigenbaum and Jeffrey Henig assessed it in 1997, “if economic policy could lay claim to popularity, at least among the world’s elites, it would certainly be privatization.”⁹³ This “privatization revolution” encouraged the melding of state and private power.⁹⁴

Here again, while the narratives of neoliberalism were at work, including that of neutrality, institutions and policymaking processes were established that distanced citizens from the democratic input and the checks and balances for which they had been clamoring. Whatever their merits, neoliberal policies could not help but facilitate the blurring of state and private relationships and authority. When walls separating functions and ensuring balance of power are weak, those functions and power balances are able to be concentrated – enabling intensified influence.

This does not mean, of course, that government bureaucracy has been put out of commission. Rather, forces have been afoot to reinvent it, to make it more informal, improvised, and more dependent on personalistic networks. As a result, by the turn of the last century, bureaucracy had become “multilayered and more diffuse,” as political scientist Jan Aart Scholte described it.⁹⁵ Of course, all this eases the fusion of state and private power and provides a hospitable habitat for the flouting of democratic practice.

What is the impact of the redesign of government on democratic governance? Political scientists Laura S. Jensen and Sheila S. Kennedy, among other analysts, have taken issue with the widely held view that “the command and control of the sovereign, once the hallmark of democratic government, has become outmoded, and is being replaced by a new management paradigm.”⁹⁶ This paradigm remakes bureaucracy away from democratic principles and process.

Making government “accountable”: If government was to be modeled after business and conducted substantially by nongovernmental entities, a way was needed of assessing performance from the outside and ensuring accountability. Thus was born the audit and a series of evaluation and management practices around it that have evolved to encompass checklist assessments, ratings and ranking schemes, metrics, and performance indices.

⁹¹ For documentation and details regarding Western-underwritten privatization in central and eastern Europe, see Janine R. Wedel, *Collision and Collusion: The Strange Case of Western Aid to Eastern Europe*, New York, NY: Palgrave, 2001, especially chapters 2 and 4.

⁹² Data on the privatization explosion and its rate of increase in the 1990s are from Martin Van Creveld, *The Rise and Decline of the State*, Cambridge and New York: Cambridge University Press, 1999, p. 375–377; and Adrian T. Moore, ed. *Privatization 98: 12th Annual Report on Privatization*, Los Angeles, CA: Reason Public Policy Institute, 1998.

⁹³ Harvey Feigenbaum and Jeffrey Henig, “Privatization and Political Theory,” *Journal of International Affairs*, No. 50, Winter 1997, p. 338.

⁹⁴ The term “privatization revolution” is from P. W. Singer’s *Corporate Warriors: The Rise of the Privatized Military Industry*, Ithaca, NY: Cornell University Press, 2003, especially pp. 66–68.

⁹⁵ Jan Aart Scholte, *Globalization: A Critical Introduction*, New York: St. Martin’s Press, 2000, p. 5.

⁹⁶ Laura S. Jensen and Sheila S. Kennedy, “Public Ethics, Legal Accountability, and the New Governance,” *Ethics in Public Management*, H. George Frederickson and Richard K. Ghere, eds., Armonk, NY: M.E. Sharpe, 2005.

Assessing public service performance through audits took off in the 1980s, with Anglo-Saxon countries that adopted the New Public Management – the United States, the United Kingdom, and New Zealand – leaders in the endeavor. The goal of refashioning the state in the image of the private sector motivated the migration of audits from their original association with financial management to other areas of professional life. The idea of audits exploded throughout society and permeated organizational life as the chief method of controlling individuals, as Michael Power,⁹⁷ an experienced chartered accountant and accounting professor, has written. Thus, by the early part of this century, “school and university rankings, ratings and league tables of municipalities and hospitals [had] become part of many people’s lives in the developed countries,” observe political scientists Christopher Hood, Ruth Dixon, and Craig Beeston. “If government itself does not provide such rankings,” they add, “news media, think-tanks, commercial firms, public-interest groups or (in a few cases) academics do.”⁹⁸

The 1980s innovations were not without precedent. The ratings and rankings of public services have a long history in the United States, the United Kingdom, and beyond. The endeavor stretches at least as far back as Jeremy Bentham’s late 18th century prescription for judging public service-providing organizations through his principles of “tabular-statement” and “comparison and selection.” The British East Indian Company developed a vast system to assess competency on the part of its officials.⁹⁹ And as early as the 1840s in the Commonwealth of Massachusetts, reformers looked to evaluate elementary school performance by comparing the results of uniform test scores across schools.¹⁰⁰

More than a century later, in the 1960s, U.S. Secretary of Defense Robert McNamara brought management practices from General Motors, where he had been CEO, to the Pentagon. To gauge progress in the war in Indochina, indices were constructed from counts of supposed enemy dead and Vietnamese hamlets pacified. An internal Central Intelligence Agency document later called the exercise “the greatest snow job since Potemkin built his village.”¹⁰¹

Potemkin-style illusions are not limited to this episode of American foreign policy. A brief look at the recent history of audit and evaluation practices shows how inadequate they are when employed as a sole means of evaluating what an organization produces, the effects of its policies, or what goes on inside it. These practices disconnect the organization and those within it from loyalty to and trust of the organization and sever it from its original spirit. For, as auditor-turned-professor Power makes plain, “audit” is an idea, not just a set of technical practices: “Audit is not passive but actively shapes the activities it is intended to control,” he observes. The proliferation of audits parallels a “fundamental shift in patterns of governance in advanced industrial societies.”¹⁰²

⁹⁷ Michael Power, *The Audit Explosion*, London, UK: Demos, 1994; Michael Power, *The Audit Society: Rituals of Verification*, Oxford, UK: Oxford University Press, 1997.

⁹⁸ Christopher Hood, Ruth Dixon, and Craig Beeston, “Rating the Rankings: Assessing International Rankings of Public Service Performance,” *International Public Management Journal*, Vol. 11, No. 3, 2008, pp. 299-300.

⁹⁹ Christopher Hood, Ruth Dixon, and Craig Beeston, “Rating the Rankings: Assessing International Rankings of Public Service Performance,” *International Public Management Journal*, Vol. 11, No. 3, 2008, p. 299.

¹⁰⁰ William T. Gormley, Jr. and David L. Weimer, *Organizational Report Cards*, Cambridge, MA: Harvard University Press, 1999, pp. 39-40.

¹⁰¹ Charles Mohr, “McNamara on Record, Reluctantly, on Vietnam,” *New York Times*, May 16, 1984, <https://www.nytimes.com/1984/05/16/us/mcnamara-on-record-reluctantly-on-vietnam.html>, p. A00024.

¹⁰² Michael Power, *The Audit Explosion*, London, UK: Demos, 1994, p. 7, 4.

Auditing, which derives from accountancy, breaks things down into observable, isolated, and often quantifiable pieces and then scrutinizes the pieces – frequently with little or no regard for the whole, as Power explains.¹⁰³ When information is broken up into bits so that essential pieces are separated from each other, knowledge, wisdom, and institutional memory are sidelined. This type of accountability is substantially removed from the internal ethics of a community to which it is supposed to apply. Accountability is imposed from the outside – without the engagement of a “moral community” – a community “that shapes (and is shaped by) the expectations, rules, norms and values of social relationships,” as political scientist Melvin Dubnick defines it. A moral community approach lies at the heart of governance “in contexts where there is a sense of agreement about the legitimacy of expectations among community members,” as Dubnick has expressed.¹⁰⁴

Yet when the legitimacy of an organization and those within are sidelined, along with their professional ethics, we are left with an emphasis on auditable outcomes and the demand, above all, to *show* that an organization’s mission is being accomplished. Simple story lines, metrics, and single indicators must be contrived to convince an audience far from the context in which the mission is being carried out. Accountability gets reduced to tick-boxes and metrics that encourage “performing” for the auditor/evaluator, congressional committee, sponsor, and public. The performance is all about the *appearance* of doing a good job, as John Clarke, a cultural analyst of bureaucracy, has observed.¹⁰⁵ With appearing to accomplish the mission rewarded at the expense of actually accomplishing it, true accountability is made more difficult to achieve. In fact, a fundamental contradiction underlies the checklist approach to accountability, as anthropologist Marilyn Strathern points out. While people aim to make their trust visible through the display of information, the very wish to do so signals the absence of trust.¹⁰⁶

The detached bureaucrat, the digital era, and the public trust deficit

These efforts to redesign government have occurred along with the dawn of the digitization era. Taken together, how has this changed the public’s perception and experience of government? What happens when an individual, seeking information or a service from the government, encounters the digital state?

A growing body of research studies how interactions of the digital age (together with checklist-type “accountability” systems and outsourcing, among other developments) have disconnected the official/bureaucrat from the client in ways never before possible. In Weberian bureaucracy, the obligation was to the client. Of course, an individual bureaucrat could be incompetent, lazy, or corrupt and not at all responsive. Still, he was supposed to

¹⁰³ This practice is patterned after the audit’s first major application after finance: industry, in which the audit applied rigid rules to the quality control and counting of mechanical items, such as nuts and bolts in a factory. Well-defined jobs had a clear list of tasks for which one employee was responsible. Employees performed discrete tasks and were not expected to know how the pieces fit together. Michael Power, *The Audit Explosion*, London, UK: Demos, 1994. See also Michael Power, *The Audit Society: Rituals of Verification*, Oxford, UK: Oxford University Press, 1997.

¹⁰⁴ Melvin J. Dubnick, *Seeking salvation for accountability*. Presented at Annual Meeting of the American Political Science Association, Boston, August 29–Sept. 1, 2002, <http://mjdubnick.dubnick.net/papersrw/2002/salv2002.pdf>, pp. 6-7.

¹⁰⁵ John Clarke, “Performing for the Public: Doubt, Desire and the Evaluation of Public Services,” *The Values of Bureaucracy*, Paul Du Gay, ed., Oxford, UK: Oxford University Press, 2005.

¹⁰⁶ Marilyn Strathern, “The Tyranny of Transparency,” *British Educational Research Journal*, Vol. 26, 2000, pp. 309-321.

respond to the client's needs. But nowadays, bureaucracy is organized into silos and information universes with bits and bytes separated from each other, treading in a sea of digital routines. Employees working in such silos are incentivized to have a stake only in their own cubicles and are evaluated by how well they perform on the silo-specific checklist. These risks are even higher when government is fragmented through outsourcing and subcontracting.¹⁰⁷

Studies of corporate organizations show how “structured unaccountability” is built into this form of bureaucracy. Functionaries in such complex organizations, be they traders in complicated financial instruments or employees or contractors working in customer service, have incentives to care only about their own silo, not about the larger outcome for the client, let alone the public. The term “structured unaccountability” was coined by a team of sociologists to capture this very disconnect. After the collapse of Lehman Brothers, the iconic Wall Street firm that fell in the autumn of 2008, signaling the global financial crisis, the sociologists interviewed dozens of Swiss, German, and Austrian bankers (managers and employees from different departments and at different levels), who described how the industry had changed. It used to be that bankers were responsible for a borrower's ability to pay back a loan. There came a point in the early part of this century, though, when they were no longer responsible for the results of their lending, only for doing deals – as many as possible.¹⁰⁸ Bonuses were generally granted according to the volume of deals made, not necessarily the consequences of any given deal. True accountability was structured out of the equation.¹⁰⁹

Little comparable work has as yet been done on government bureaucracy. But an emergent literature in anthropology that examines how people meet and experience the state in the age of digitization and checklist accountability finds that users' experience may not be positive.¹¹⁰ As an anthropologist studying social welfare in Norway puts it, “the notion, propagated by both the Norwegian government and intergovernmental organizations like the OECD, that digitizing the user's experience of the welfare state will bring only benefits very much

¹⁰⁷ Janine R. Wedel, *Unaccountable: How the Establishment Corrupted Our Finances, Freedom and Politics and Created an Outsider Class*. New York, NY: Pegasus Books, pp. 30-47.

¹⁰⁸ Some of these bankers would not entertain any responsibility for enabling the crisis, saying they knew only their own piece (read: silo) of the operation. Structured unaccountability, sociologists Honegger, Neckel, and Magnin concluded, not only abetted the crisis, but also relieved the bankers of culpability. (Claudia Honegger, Sighard Neckel, and Chantal Magnin.

Strukturierte Verantwortungslosigkeit: Berichte aus der Bankenwelt. Berlin: Suhrkamp Verlag GmbH und Co. KG, 2010.)

¹⁰⁹ Claudia Honegger, Sighard Neckel, and Chantal Magnin. *Strukturierte Verantwortungslosigkeit: Berichte aus der Bankenwelt*. Berlin: Suhrkamp Verlag GmbH und Co. KG, 2010, pp. 306-307.

¹¹⁰ See, for instance, Kelly McKowen, “Face-To-Interface: Social Welfare and the Digital State in Contemporary Norway,” Panel on “Screen-level Bureaucracy: Organizational Encounters in the Digitized and Automated World,” Presented at the Annual Anthropology Meeting, December 2, 2017; Julia Rahbaek Moller, “Digitizing Social Work in Denmark,” Panel on “Screen-level Bureaucracy: Organizational Encounters in the Digitized and Automated World,” Presented at the Annual Anthropology Meeting, December 2, 2017; Matthew Hull, “Oral Self-Presentation in a Law of Writing: Software Records and Written Statement in Police Procedure,” Panel on “Screen-level Bureaucracy: Organizational Encounters in the Digitized and Automated World,” Presented at the Annual Anthropology Meeting, December 2, 2017; and Elizabeth Youngling, “It's not an exact science”: Regulation, Automation and Risk in the Mortgage Lending Industry,” Panel on “Screen-level Bureaucracy: Organizational Encounters in the Digitized and Automated World,” Presented at the Annual Anthropology Meeting, December 2, 2017;

<https://www.eventscribe.net/2017/aaa/fsPopup.asp?Mode=sessioninfo&PresentationID=309312>.

overlooks various effects of the previous physical or digitally-supported experience that resist measurement or quantification...[T]hey are no less important.”¹¹¹

Might today’s form of bureaucracy help undermine trust in public institutions? Is there a connection between government bureaucracy’s responsiveness to the public and trust in the institutions of government? Public trust in institutions has plummeted: Worldwide, public opinion polls over recent decades show a striking loss of public trust in institutions – from courts and parliaments to banks and corporations to the media. Is this fall related to these institutions’ diminished ability to satisfy public needs?

In 2018 a full two-thirds of the countries measured by the firm Edelman were deemed “distruster,” with less than half of their people trusting in mainstream institutions. A year earlier, Edelman called the situation worldwide an “implosion of trust.”¹¹²

Many societies have traditionally had little faith in their countries’ formal institutions. A case in point is societies schooled in communism (during certain periods). As I learned through on-the-ground study as a social anthropologist in 1980s communist Poland, such societies become accustomed to not trusting in formal institutions (and find ingenious workarounds to sidestep them to the extent possible). But that was not the case in the United States or Western democracies more generally, where many people genuinely believed in civic institutions 30-40 years ago.¹¹³ Today, by contrast, trust is in freefall, as measured by Edelman and other public opinion polls. The U.S. picture is notably dire, especially among the “informed public.”¹¹⁴ According to Edelman,

The collapse of trust in the U.S. is driven by a staggering lack of faith in government, which fell 14 points to 33 percent among the general population, and 30 points to 33 percent among the informed public. The remaining institutions of business, media and NGOs also experienced declines of 10 to 20 points.¹¹⁵

And indeed, as posited by Edelman and other public opinion polls, the crisis in trust stretches far beyond government institutions. Whether it’s a bank, insurance company, clinic, public school, news source, union, or even place of worship, all have posted staggering declines in confidence. Confidence in civic institutions has been on the wane in the United States since the 1970s, according to Gallup. Its most recent Confidence in Institutions survey shows that

¹¹¹ See, for instance, Kelly McKowen, “Face-To-Interface: Social Welfare and the Digital State in Contemporary Norway,” Panel on “Screen-level Bureaucracy: Organizational Encounters in the Digitized and Automated World,” Presented at the Annual Anthropology Meeting, December 2, 2017, p. 7.

¹¹² “Confidence in Institutions,” *Gallup*, 2017,
<http://news.gallup.com/poll/1597/confidence-institutions.aspx>

¹¹³ A poll published in 2007 on declining trust globally and corruption shows that, over the last four decades, nearly all of the so-called developed, industrialized democracies have been experiencing a decrease in public trust in government. This has not occurred at the same pace or necessarily for the same reasons everywhere, but the trend is pervasive. (Peri K. Blind, “Building Trust In Government In The Twenty-First Century: Review of Literature and Emerging Issues.” 7th Global Forum on Reinventing Government: Building Trust in Government 26-29 June 2007, Vienna, Austria, November 2006, <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan025062.pdf>, pp. 8-23.)

¹¹⁴ 2018 Edelman Trust Barometer, <https://www.edelman.com/trust-barometer>.

¹¹⁵ 2018 Edelman Trust Barometer, “2018 Trust Barometer Reveals Record-Breaking Drop in Trust in the United States,” <https://www.edelman.com/news-awards/2018-edelman-trust-barometer-reveals-record-breaking-drop-trust-in-the-us>.

trust has decreased by double-digit percentages since the 1970s for 12 out of 17 institutions, including the signature ones of the presidency, Congress, banks, and the press.¹¹⁶

A majority of these institutions themselves, I would observe, are fundamentally different than they were at the time public trust was first measured. A bank of today is not the bank of the 1970s, when you could get a mortgage by talking to the local lending officer with whom you could meet face to face. While he might not meet your needs, at least he had the authority to take into account your own history and circumstances in his decision. Today these decisions are dictated by algorithm in some unseen office. The local bank branch looks the same, but it's now a powerless extension of a financial giant.

The same applies when you have a sinus infection and need to see a specialist. While you used to be able to call the doctor's office directly, and perhaps speak to someone you knew who could tell you if you needed to be seen, now you have to call an 800 number that routes you through an incomprehensible phone tree and eventually connects you, if you are lucky, with people who themselves are powerless.

While you may have grown up with this new-style bureaucracy and know nothing else, or simply grown accustomed to these new-style bureaucracies, in reality these changes have proliferated throughout our lives in lightning speed. This is the new normal.

You don't have to spend much time punching through a phone menu to realize that no one, besides you, is incentivized to care if you get a mortgage or heal your sinus infection. And, while you know that you're interacting with machines, the frustration, impersonality, powerlessness, and alienation you feel is reminiscent of something I've experienced before: the daily disaffection that eventually led people under communism to revolt. Americans (and many other peoples) have recently lost a lot of power and become disconnected from community in ways that can't entirely be explained by income or social inequality.

Concluding thoughts

Bureaucracy, government, and practically all things "public" are under enormous siege in the age of Trump. This comes at an already perilous moment. The forces of privatization, deregulation, and digitization, among others, have reorganized governance in a way that has weakened public institutions, apparently serving to make them less responsive to the people they are supposed to serve. This may well be connected to the collapse of public trust; wholesale disaffection is surely a key reason that voters have elected the likes of Trump and his counterparts elsewhere. Now that Trump is in power, he seems bent on attacking further these already weakened pillars of democratic society.

We need to rethink the role that a well-functioning bureaucracy might serve. The "public" must come back as a virtue. Establishing a vibrant public economy relies on bureaucracy – that is, bureaucracy that truly serves people. I am not arguing for a nostalgic throwback to pre-digital times. That is neither possible nor desirable. However, we need to reconsider developments such as the outsourcing of inherently governmental functions and the prevailing checklist approach to accountability. True accountability cannot be reduced to

¹¹⁶ "Confidence in Institutions," *Gallup*, 2017, <http://news.gallup.com/poll/1597/confidence-institutions.aspx>.

metrics that are poorly conceived, obscure the broader picture, and encourage momentary appearances over reality based on-the-ground assessments. True accountability must not be confused with performances of accountability that are severed from larger institutional knowledge, from the spirit of true accountability, and from the public's faith.

A robust public economy is needed to help restore public trust. No democratic society can survive indefinitely without it.

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The need for a new public administration

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Abstract

The economic model according to which markets are self-equilibrating rests on a world-view of harmony and stasis that goes back to classical China, and was already fully rejected in all domains of science and also in political economy in the 19th century. Somehow it survives in textbook economics to this day. A new public administration needs to rest on modern scientific habits, recognizing that all biological, mechanical and social systems require effective regulation, not to "reduce externalities" but because otherwise they cannot exist at all. Once this is recognized, the task of government is to make regulation and public provision of services work well, minimizing predation, parasitism, force and fraud.

Public administration was at one time an essentially pragmatist and Institutionalist discipline, concerned with imparting best-practice knowledge of procedure, hierarchy, the missions and functions of agencies and the separation of powers, as well as rule-making and budgeting, under a broad structure of belief that organized methodical action – the stuff of bureaucracy – was more likely to bring success to the state than the impulses of kings or dictators or the habits and dogmas of priests, let alone those of mad charismatic commanders on the battlefield. One might say that in modern America public administration was rooted in the victory of Grant over Lee.

As a discipline these ideas were founded on Hegel's admiration of the Prussian state and Weber's concept of bureaucracy as the vehicle for rational action. These reached their zenith in America with the Progressive movement, the New Deal and the (popular image of) industrial mobilization for World War II. By the 1960s that zenith was past. The application of bureaucratic rationality to the Vietnam war did a great deal of damage. And as the administrative state took hold in the civilian sphere, it engendered an ethno-populist reaction to civil rights, voting rights, anti-poverty programs, public lands and environmental protection. The "best and brightest" were reviled by one camp and the "pointy-headed bureaucrats" by another.

At the Pentagon in the 1960s under Robert McNamara teams of analysts attempted to establish rational control of a vast establishment, riven by internecine rivalries, through the tool of the budget. This was the Planning-Programming-Budgeting-System (PBBS); a later incarnation was known as Zero-Based-Budgeting (ZBB); still later these ideas were disseminated and reached even to Texas (and other states) in the loosely-related form of Sunset Review. The idea was to use the budget to empower an evaluation function in an otherwise highly inertial, even uncontrollable system. An analogous notion was that of macroeconomic control through the counter-cyclical variation of the federal budget. A still-later and still-current idea was the use of congressional Budget Resolutions to force choices between programs and to discipline the growth of total government spending. Success was in all cases imperfect.

The ethos of analysis had a strong bearing on the formation of university programs in public policy, which were layered over public administration institutes and programs in the early 1970s as the veterans of the Kennedy and Johnson administrations took themselves back to

academic life. A core curriculum in policy would stress – and largely still does – analytical concepts drawn from welfare economics, statistical and econometric techniques, public budgeting as an instrument of policy control, and – not quite as an after-thought, but with diminished place and prestige in the programs – some basics of management, accounting and administration. The premise of the curriculum is that policy analysis has a role in the improvement of public decisions. It is that evidence and technique can be brought to bear on some larger public goals – national security, social welfare, environmental protection – and that it is within the capacity of social science to improve well-being by adding here, trimming there, that is, to evaluate the merits of alternatives at the margin.

Not everyone was persuaded. Early on, the curmudgeon Charles Lindblom advanced the counter-hypothesis of “muddling through” as approximately the best one could hope for. Aaron Wildavsky developed a school of budget marginalism – the positive rather than normative analysis of small changes in program spending over time. In glosses on Wildavsky, I (and later, Calmon and still later, Berner) recast budgetary marginalism as the least-conflict resolution of an evolutionary negotiation or sharing game, using numerical taxonomy to classify the players who underlie accounting categories in the budget. Still, by and large, the premise of intended policy rationality held.

From perhaps the mid-1970s forward, the project of policy rationality faced a take-over by economists. For this the groundwork had been laid by Samuelson and his academic allies, who framed the public sphere as one of “market failures” characterized by externalities or public goods. This framing accepted the centrality of markets to the social ecosystem, restoring a concept of equilibrium that had been subordinated for 40 years to the necessities of fighting Depression, winning a war, and fending off the juggernaut of world communism. In a mental compromise typical of establishment liberals then and since, the inevitability of a public sphere was acknowledged but its role was defined as auxiliary, if not peripheral, as necessary yet somewhat regrettable – as something to be deployed only to the extent that “the market” might not be able to do the job on its own.

Following these lines, in the Carter years the Council of Economic Advisers under Charles Schultze interjected economists throughout the federal inter-agency decision-making process, the concept of cost-benefit analysis began to be applied to “interventions” by regulatory agencies, and there was a wave of “pro-competitive” deregulation, notably in trucking and the airlines, following textbook models and the professional certitudes. Both cases produced adverse effects on wages for the affected workers, and unforeseen consequences for the organizational pattern of the industry. By the end of another generation, airlines were larger, but just as concentrated as they had been in the early 1970s, with a handful of carriers dominating the domestic market. Alfred Kahn, architect of deregulation, remarked later that it had not occurred to him that airlines were something more than “marginal costs with wings”.

After 1981, and following a brief early pause in the deregulation of trucking – a political gesture to the Teamsters for having backed him in the 1980 elections – Reagan’s administration deepened the commitment to economism, embedded cost-benefit analysis formally into rule-making and created an Office of Information and Regulatory Analysis in the Office of Management and Budget, which became an obstacle course and choke-point for the implementation of congressional intent.

Over time, the influence of economists and their allies in “law-and-economics” in rule-making and in the larger processes of fiscal control became decisive. Under Clinton and Gore the

watchword was “reinventing Government” through a commercialization of the relationship between the public sphere and the private citizen, alongside business-friendly deregulation especially in the critical sphere of banking and finance. Under George W. Bush deregulation was complemented by desupervision and (as William K. Black has put it) *de facto* decriminalization of financial fraud, along with the reduction of personnel and their replacement by websites and online “services”. Under Barack Obama, behavioral economists had their turn, introducing the concept of the “nudge” into regulatory design and process.

Throughout these variations, the reputation of government came under repetitive deprecation. In particular the analytical concepts of “rent-seeking” and “government failure” were added to that of market failure, despite the fact that government had never been made the center of the analytical frame, the standard against which other processes should be measured. There was no modern analysis – none since Hegel and Weber, holding as neoclassical economics did for markets that government processes were somehow naturally optimal. At the height of the New Deal, for instance, Roosevelt’s message was experimental: “take a method and try it. If it fails admit it frankly and try another. But above all try something”, while in the 1960s the mission of the defense analysts (and later, the anti-poverty analysts) was to wrestle with the *pathologies* of bureaucratic process. The classic defense of democracy was only that it was better than the alternatives. In this sense the economists’ assault merely stated the obvious, while lending ballast to anti-government zealots, of whom the economists did not openly approve.

And government shrank. The government shrank, shedding employees and functions, to the point where by 2017 it was small enough, apparently, to be drowned in the proverbial bathtub by the new administration of Donald J. Trump. That process is now underway. The mask of analysis has been dropped and the underlying agenda, which is to turn public lands, resources and functions over to private parties, is transparent. In other work I have called this “the Predator State”.

As noted, as a rule mainstream economists do not personally support the displacement of technocrats and analysts in favor of direct rule by plutocrats and lobbyists. Their worldview is moderate. They favor a process of reasoned mediation between market forces and other social concerns. Such a process incidentally provides employment for economists. But more to the heart of the matter, in the eyes of the economist the existence of a process of technical and analytical review is justified by the standing of analysis; analysis generates a presumption of legitimacy that might not otherwise be there. Analysis can sugarcoat rapine; an ecologically-destructive project for which a permit is issued after an analysis is easier to accept, than the identical project would be in the absence of a review. But to be fair, the outcomes are not always anti-government. Cost-benefit analysis can from time to time support an intervention into the market, making an otherwise contested case for a regulation stronger than it would otherwise be.

Still, having placed the market at the center of the decision-making universe, having decreed the general superiority of price-adjustment as the foundation of social interactions, having embraced the ancient notion of equilibrium – which dates back to classical Chinese notions of celestial harmony, of yin and yang – and having never absorbed the idea of evolution, economists leave the burden of proof, almost always, on the advocate of “intervention”. If there is doubt, or a balance of judgments, non-intervention or at least less intervention is to be preferred. The unstated presumption is that the market process exists independently of the “intervention”, and is governed by “natural law”. It is presumed that without the government’s

role, the results of the market process might be better, or might be worse – but that there would *be* a market process and there would be a *result* of that process.

This presumption is almost entirely false. Marx long ago pointed out that there was no such thing as “Nature” in its pure or primal state; all purportedly “natural” environments on the planet were and have been transformed by human endeavor over the eons. Something similar can be said about markets and the state: there are no markets without governance and government and regulations. More precisely: just as Adam Smith pointed out that the division of labor depends on the extent of the market, so the extent of the market depends on the reach of the state – on its capacity to provide security, a framework of law and justice, and to regulate effectively in the public interest. Without each of these, many if not most modern markets could not exist in their actual form.

Examples are legion. How well would cars function in cities without streetlights and stop signs? Would passengers fly in commercial aircraft in the absence of air-traffic control? Would homemakers buy and eat fresh raw vegetables if they did not have reasonable confidence of non-contamination by hepatitis and heavy metals? Would appliances and electronic equipment sell so well, if there were no assurance that they would not electrocute their owners, too often? Would banks survive without deposit insurance? Even with insurance, how stable are they when the regulators and the supervisors are taken away? To be sure, nothing is entirely safe. But in each and every instance, some level of public presence alters the economic landscape, permitting businesses and entire industries to flourish that would otherwise be much smaller, if they existed at all.

Since the origin of political economy in the 18th century, economists have placed the productive unit – the farm, the workshop, the factory – at the center of their worldview. They have treated the rest – the infrastructure, public health, social insurance, schools and universities and the regulators – as a support system, a conceptual periphery to the productive core. In fact, as the experience of strategic bombing in Germany showed, modern factories are largely outgrowths of the infrastructure – social and physical; if they are destroyed but the infrastructure remains – as was the case in post-war Germany – the factories grow back quickly, like puffballs after a rain.

Regulation is the key institutional and political component of infrastructure. Regulation sets and enforces standards on matters that the consumer cannot easily see: the phyto-sanitary condition of food, the reliability of machines, their efficiency in the use of resources, the safety and environmental soundness of the production process, the level of wages and the quality of working conditions. The “factors of production” that so bemuse economists – human capital, physical machines and technology – are easily moved, by airplane, ship and optical fiber, from a rich country to a poor one. Physical infrastructure requires a sustained act of resource mobilization and the application of design and engineering skill. This is hard.

But regulation is harder still. To regulate effectively requires the full spectrum of scientific knowledge combined with operational capacity and enforcement, and all of that combined with autonomy from the resentful, evasive and potentially corrupting subjects of the regulatory process. Regulation is a delicate balancing act. It requires a democratic legal process on one side but also a free and fearless scientific and engineering estate on the other – one whose judgments are capable of commanding respect, and are in fact respected. The successful achievement of this balance – where it has been achieved at all – is practically a preserve of the richest countries – acquired painstakingly and easily squandered.

Turning this proposition around, it follows that the deep distinction between advanced and “developing” or “less-developed” countries does not lie in their capacities for education or their adoption of technologies and advanced capital equipment. It does lie partly in their capacity to build and maintain a modern physical infrastructure. But, even more, it lies in their ability to build an advanced administrative and regulatory state. In the poorest countries, such a state is typically altogether absent. In the communist lands, it was present but in a crude and oppressive form, capable of implementing science-based crash programs (the bomb, the space race, military aviation) but not of generating advanced consumer-goods production of high quality and diverse fashion on the mass scale. And it was this failure, rather than any inability to provide the basics of food, shelter and clothing, education and health care, that eventually brought the communist systems down.

There is an exception. In one case, a communist system was able to transform itself into a powerhouse of consumer manufactures, of steadily improved quality and on a volume sufficient to clothe, house, transport and entertain about a fifth of the population of the world. How did China do it? In part, to be sure, by importing technologies from the West, with co-production and technology-transfer requirements on foreign investments. In part, by decentralizing administrative control over a large class of light industry – the township and village enterprises (TVEs). Much more, by prioritizing infrastructure spending so that the foundations of urban life were present to support the production units that cities foster. China’s regulatory systems were, and remain, weak. They are far from adequate to set and enforce the quality controls that are routine in the West. This is a grave – and on the theory above, a lethal – shortcoming. And yet, it wasn’t.

China overcame the shortcoming by a measure as simple (in broad outline) as it proved effective. The Chinese imported regulatory standards from their Western markets. That is, they learned what Western buyers needed, practiced the techniques until those buyers were satisfied, and deployed them at “Chinese scale” for exports but also for the home market. This is why the consumption patterns in China today so visibly resemble those in the West – as they do not, in many poor countries.

China also illustrates the conditions that a failure to regulate engender. Very few Chinese, even now, eat uncooked vegetables or fresh salads. This is because the Chinese consumer does not trust the phyto-sanitary standards under which vegetables and lettuce are grown – and does not wish to trouble with the cleaning-at-home that would be required to reduce the dangers. It is safer and easier to stick with the habit of cooking almost everything in hot oil. But, as it happens, fresh lettuce is available in some parts of China. At least in some of the big coastal cities it is available, for instance, at Sam’s Club, in packages denoting that the lettuce in question was picked and packed in the United States. A reputation for effective regulation makes that market, small though it may be, possible.

The central role of regulation in the development process has been demonstrated in other contexts. In Sweden as early as 1951, Meidner and Rehn explained that wage standards, compressing the income distribution, would work to the advantage of advanced industries and the detriment of uncompetitive ones. Over time, this would (and did) change the mix of industrial activity in Sweden toward the advanced, high-productivity and high-income sectors, notably machinery, transportation equipment, nuclear power, generating an economic surplus that made possible the Swedish welfare state. Something similar was achieved in Norway by well-regulated use of the North Sea oil bonanza. Closer to home, in the 1970s the US Labor Department attacked the problem of brown lung disease among cotton mill workers; the

resulting investments in clean factories raised the productivity and preserved the competitiveness (for a time) of the more progressive textile firms. As is well-known, the State of California sets a national standard for automotive emissions control, a byproduct of the ages-old problem of atmospheric inversion in the Los Angeles basin.

In an advanced society, regulations cover all aspects of every production process. They set limits on the extraction of natural resources from the soil. They discipline the production process itself, with respect to safety, working conditions, carcinogens and much else. They establish standards for the quality of the product. They limit the emission of waste products. Resistance to regulation is the hall-mark of reactionary politics and backward business practices, as for example the case of the coal industry whether in the anthracite hills of Appalachia or the lignite mines of Germany and Texas. Constructive engagement with regulation is the mark of a progressive business sector, as one finds in parts of modern Europe and in parts of East Asia, notably Korea and Japan. Rebellion against regulation is the key feature of the reactionary takeover of American government now underway; it will yield the bitter fruit of market breakdowns, lost competitiveness and a lower living standard in the long run.

Regulations are the stuff of well-organized life, of social order and well-being. But can a country with good regulations live on them? Can good regulations actually substitute for the productive processes that the wealthy countries are increasingly losing to their poorer trading partners? It turns out that, to a degree, this is possible. China, to take the example already mentioned, was (and remains) perfectly willing to export to Western markets for the dubious recompense of an electronic chit in the Chinese accounts at the Federal Reserve Bank of New York. So long as the Chinese balance-of-trade continues in surplus, which is to say, so long as the world remains similar to what it is today, China will never actually use those balances; they will merely add up, one on top of the other. So in exchange for issuing Treasury bonds, which are effortless to produce, the United States (and other Western countries) benefit from a vast flow of Chinese production. The willingness of the Chinese to put up with this can be attributed largely, if not only, to the benefits they get from steady improvement in the quality of the goods that Chinese consume at home. Regulation, and perhaps the contribution made – or once made – by the US Navy to the security of shipping routes, are together significant intangible elements in the US balance of payments; they are cornerstones of the world trading system that has emerged in the age of mass industrialization of what used to be called the Third World.

This brings us back to the need for a new discipline of public administration. To build such a structure, the first critical step is that public administration must be decolonized by the economists. There is no doubt place for ongoing teaching of historical experience and of practice, both in the management of large organizations and in accounting and financial control. I would argue, in another place, for the articulation of a political science of budget behavior based on the simple proposition that the only sustainable equilibrium in a system of financial shares is for each claimant on the public's resources to accept the same growth rate as all of the others. Anything else – it should be obvious – results in relative gains and relative losses, which must eventually come to an end.

For present purposes, however, it seems that a different element of a new public administration is the most essential thing. And that is to understand the function of the public sector from the perspective of the regulatory system.

In related work, Jing Chen and I have advanced a biophysical perspective on socio-economic phenomena that is relevant to the case. Our argument, in a nutshell, is that all living systems – whether biological, mechanical or social – function in accord with certain immutable principles, governed by thermodynamic law. All extract resources from their environment. All process those resources, generating useful energy, put to purpose. And all release waste.

But most important for the present argument, *all* biological, mechanical and social systems must regulate their use of resources. They regulate to keep energy released in the consumption of resources within the tolerances of the materials available for containing and directing that energy to useful effect. Thus mammals regulate their blood pressure (and it is a curious fact that the normal blood pressure of all mammals is approximately the same) and their body temperatures. To keep cool, they sweat or pant; to fight off cold they cover themselves with fat and fur. If the blood pressure goes too high, the classic symptoms – stroke, aneurysm, heart attack – are related to the inability of the processing structures to cope. Similarly for engines: fans, radiators, cooling systems, and metals strong and resilient enough to stay in shape in the face of high-temperature operations. The greater the heat differential, the more efficient the engine.

The need for similar forms of regulation in social and economic systems are so widely known and acknowledged that we sub-consciously adopt the metaphors of biological and mechanical systems. We speak of “depression” in both the psychological and economic sense. We speak of “bubbles” to indicate an intrinsically unstable (because unregulated) phenomenon, destined to fail. When failure happens, we speak of “market melt-downs”. That deregulation is the parent of melt-down in the financial sphere, especially, is so well-established as no longer to require debate. The purpose of regulation is not modify the behavior of an existing market. It is to alter the conditions of economic and social life, so that ever-larger and more-efficient structures can flourish and be sustained, permitting to all a greater access to comfort and an easier and healthier and happier and longer life.

Let me suggest that the creation of a new discipline of public management and public administration in the modern academy should start from this point of departure. To make it happen, it would be sufficient for university leaders and administrators to commit an act of will and a dedication of resources – much as they have done, over the years, to the sciences and engineering and to the practical aspects of business. To make it stick, there would need to be, in the enterprise, an ironclad assurance of dedication to modern conceptions of evolutionary process, and an immunization from the temptations of equilibrium and illusions of self-organized, self-regulating harmonies. These are, after all, classic delusions of an *ancien régime*.

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Industrial policy, then and now

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Abstract

After 40 years of neoliberalism, even governments believe that they are inefficient when compared to the private sector. And economics, in its swing to the right, reinforces this view. The philosophy behind public expenditure for social purposes and the criteria for judging such projects has not been a subject for public debate until recently. In particular, industrial policy was very simple: leave it to the private sector to allocate resources as the market prompts. In Keynes's time this was not the case. This article reviews some of the issues concerning industrial policy that were aired in the interwar period. The debate needs to be revived, revisited and, where appropriate, revised to suit the present day, but on basic principles there is much to learn from the interwar discussions. The contrast between the recent (2018) UK government's White Paper on Industrial Strategy and the Liberal Industrial Inquiry's *Britain's Industrial Future* (1928) is quite instructive.

Keywords

industrial strategy, industrial policy, The Yellow Book, Keynes, public purpose, profit.

Economists tend to see industry and government as two entirely separate sectors – indeed it is quite standard to treat government as outside “the Economy” altogether: G is an exogenous variable. This practice is, of course, nonsense. Government is a major producer of goods and services: schools, hospitals, the police, the armed forces, infrastructure and so on. What keeps those goods “outside” the economy, in economists' minds if not in the minds those who consume the products, is that the decision to produce them is taken politically and those who consume them are not the same group as those who pay for them. “Economics” has traditionally concerned itself only with production for market sale. As June Sekera (in conversation) has pointed out, that leaves economics analysing probably less than half of actual economic activity, when both the State's non-market production and household production – equally outside “the market” – are taken into account.

This paper is concerned with the element of government policy that blurs the line between private enterprise for market sale and the provision of public goods, namely industrial policy, where “the line of demarcation between [public and private enterprise] is constantly changing... [N]o great question of principle is involved” (Keynes, 1927: 695). A little over a year ago, interest in industrial policy would have been thought wildly eccentric: it was understood to be a non-topic after years of being rubbished as “picking winners”, an activity which, as “everybody understood” after some pretty obvious failures in the 1960s, government was very bad at. The prevailing prescription was that government should not meddle in private enterprise; they should deregulate and leave it to competition to solve all problems. Government would only make matters worse. Economists have been dripping this poison into the ears of politicians and the electorate for about 40 years now, until it is very widely believed, even within government itself. (It is based on a theory that assumes market participants have perfect knowledge, so of course government cannot improve matters. Naturally, this assumption is never mentioned.)

Astonishingly, despite the weight of this opinion in public life, in July 2016, Theresa May, on her appointment as Prime Minister, created the Department for Business, Energy and

Industrial Strategy (BEIS) from the former Department for Business, Innovation and Skills; and early the next year, the Department published a Green Paper, *Building our Industrial Strategy*. Industrial policy, the Cinderella of government activities, for so long kept well out of sight, had exchanged her rags for decent clothes and strode into the daylight.

Later in 2017 the Fabian Women's Network invited me to give a short talk on the Green Paper. I contrasted some of its values with those expressed in various places by Keynes in the interwar period. It occurred to me then, though there wasn't time either to do the work or to talk about it, that it would be interesting to compare the Green Paper with the book produced by the Liberal Industrial Inquiry in 1928: *Britain's Industrial Future*, known, for its cover, as the Yellow Book. And now there is a White Paper, *Building a Britain Fit for the Future* (BEIS, 2018) for the comparison.

The Yellow Book is a report of a committee known as the Liberal Industrial Inquiry (LII), on behalf of the Liberal Party. The Party was not only not in power, but their prospects for power were dim: they were in the process of being squeezed out by the Labour Party. But the Inquiry could command some of the best brains: its Chairman was Walter Layton, at the time editor of *The Economist*; its Executive Committee included Lloyd George, H. D. Henderson and J.M. Keynes. Among those who served on one or more of its special committees were D.H. Robertson and Sir Josiah Stamp.

If I were to summarise the way each strikes me, the Yellow Book explains what it sees as the public purpose in the industrial field; the White Paper reads like a shopping list.

Public purpose

Liberal philosophy

The Yellow Book opens with an Introduction in which the Liberal vision of public purpose is explained. Democracy, it says, exists to remedy grievances and to create the conditions in which all have the opportunity to live a full and free life. There is a balance to be struck between social justice and efficiency, to those ends. The main grievances at the time they identify as economic, pointing to a wide disparity of incomes, widespread un- and under-employment, and poor housing for some while others do very well, often for no apparent reason. These factors cause further inefficiency, as they lead to industrial strife. (The few of you old enough to have seen the film "I'm alright, Jack" will know what they are talking about.) Yet their ambitions are not radical: such were the perceived merits of the system in harnessing energy and resourcefulness that they wished only to identify and cure the ills, leaving the basic structure intact.

How far should the State go?

Keynes's view of the scope of government action, a few years before the Yellow Book was published, was quite conservative: "... not to do what individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not done at all" (1926: 291).

The Inquiry took a somewhat broader view. They disclaimed any interest in state intervention *per se*, but they recognised that the scope for beneficial action is larger than what was

normally (for the time) assumed, because the structure of production had changed. The small sole proprietorship or partnership with unlimited liability is a system in which the inefficient or otherwise inadequate are quickly eliminated at comparatively little social cost. This form of business organisation had been in decline for some time, and the larger joint-stock company, with its separation of ownership and control, had taken the commanding heights. Some had near-monopoly power. Most could influence the market by advertising and the like. This institutional change meant that, if competition ever did solve most economic problems, it certainly would not do so in 1928:

“The theory that private competition, unregulated and unaided, will work out, with certainty, to the greatest advantage of the community is found by experience to be far from the truth” (LII: xix).

The economic theory that concludes that perfect competition will lead to Pareto optimality is based on the small firm of the type that was disappearing.

The introduction goes on to state briefly the Liberal political philosophy: that the state can enhance individual liberty, but its interventions can go too far. The Inquiry regards the debate between individualism and socialism as not worth their time, for in their view it pertained to the economy of some 50 years earlier: it was declared obsolete. (It is amazing how long hoary old theories hang about; this one is, of course, still with us.)

The Introduction ends on its opening theme:

“We believe with a passionate faith that the end of all political and economic action is not the perfecting or the perpetuation of this or that piece or mechanism or organisation, but that individual men and women may have life, and that they may have it more abundantly” (LII: xxiv).

A preliminary idea of what this meant in practical terms is indicated by the structure of the main body of the volume. There are five sections or Books. The first is an analysis of the state of British industry, in which they identify unemployment, low productivity and wages, and decline in specific industries as the central problems. The search for solutions is far-reaching: Book 2 deals with the organisation and governance of business, Book 3 industrial relations, Book 4 a sectoral analysis of business, and Book 5 national finance and taxation. Their scope is not purely national, for the collapse of International trade, still continuing from the First World War, is held responsible for the high concentration of unemployment in the export industries.

Is public purpose unmentionable?

“To suggest social action for the public good to the City of London is like discussing *The Origin of Species* with a bishop 60 years ago ... An orthodoxy is in question, and the more persuasive the argument, the greater the offence” (Keynes, 1926: 287).

Today it is not only the City but almost the whole of society that refuses to discuss – perhaps even to acknowledge the existence of – public purpose. Although letting Cinderella out into the daylight may encourage you to think that the present Government understands public purpose or the public good in the industrial sector, I do not think the words appear once in

either the Green or the White Paper. Perhaps they were considered unmentionable, would frighten the horses, that sort of thing. They still frighten the City of London, a place where campaign donations regularly find their way to the Tory Party and lobbyists are very active. There is certainly no discussion of what public action is for at the level of the Yellow Book's Introduction. But there are little snippets, and some elements of the Government's view can be inferred.

The Prime Minister, in her Foreword, speaks of her "belief in a strong and strategic state that intervenes decisively whenever it can make a difference" (though what sort of difference is left open) and her aim to create a Britain that "works for everyone" (BEIS, 2018: 4). The latter objective is most clearly manifest in the proposals in both Papers to strengthen economic activity outside the south-east.

The nearest thing to a discussion of purpose in the White Paper is the "vision statement". It is entirely in economic terms (p 13):

"Our vision is for:
The world's most innovative economy
Good jobs and greater earning power for all
A major upgrade to the UK's infrastructure
The best place to start and grow a business
Prosperous communities across the UK."

Apart from the words "for all" and "communities" there is no sense of the social dimension, let alone social purpose, in this vision. And the prospect of "good jobs" is the only concession to social justice – quite an omission in this era of zero-hours contracts and MacJobs. All the rest assumes that if the economy is booming, everybody will be happy and the Government's purpose, if not the public purpose, is fulfilled.

The vision statement reads as if people are here to serve the economy, not the other way round. A booming economy serves the state, too, as it can boast "best in the world" about its business environment.

Social purpose is thus assimilated to the purpose of private enterprise. So it is not surprising that they

"believe in the power of the competitive market – competition, open financial markets, and the profit motive ... But governments have to work through the factors responsible for higher productivity and earning power[,] coordinate and convene efforts to develop and disseminate new technologies and industries[,] ... make long-term investment[s] ... and ... [pool] risk" (pp. 21-2).

This goes some way towards Keynes's view that government should mitigate risk, uncertainty and ignorance (1926: 291) and has the advantage of being able to take the long view:

"I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage" (1936: 164).

But it is still a far cry from the vision of 90 years ago:

“The task is one of... harmonizing individual liberty with the general good and personal initiative with a common plan—of constructing a society where action is individual and knowledge and opportunity are general, and each is able to make his contribution to the efficiency and diversity of the whole in an atmosphere of publicity [transparency], mutual trust and economic justice” (LII: 63).

You would search in vain for anything this high-minded in the White Paper. The Government’s purpose – their only purpose – is industrial success. Let us examine the three elements that they consider the keys to that success.

Competition, open financial markets and the profit motive

Competition

You have already seen the scepticism with which the Inquiry greeted unregulated and unaided competition. Many, perhaps most, of the members were men with some experience of real-world business and knew how it operated. Economic theory portrays competition as acting only through price. But there are many other ways, not all of them socially desirable or even legal, by which to compete: advertising, creative accounting, industrial espionage, and so on. Many business firms today prey on their customers instead of serving them. Think of Payment Protection Insurance, energy tariffs and bank deposit rates that disadvantage loyal customers, RBS’s treatment of small and medium-sized businesses, fixing LIBOR and so on. The Government itself has been ripped off by G4S, Carillion and I’m sure many others. Some of this kind of thing has always gone on, but now it is rife. Surely it should be a government priority to stamp out these practices, but such action forms no part of the Industrial strategy. They are an aspect of competition that is not mentioned.

The Yellow Book’s authors started by looking at industry: how it was organised and governed and how it worked. Three chapters each in Books 2 and 3 analyse these matters thoroughly. Comparisons were made with pre-war industry and conclusions drawn about the significance of those changes. Considerable emphasis – a chapter in fact - is given to the operation of what they term public concerns, that is, enterprises operating mainly or wholly in the public interest and not driven to maximise profit.

Interest in this type of concern is foreshadowed in Keynes’s *The End of Laissez-faire* (1926), in which he praises the form of governance developed by corporations (in the UK semi-autonomous bodies, usually within the State, not ordinary business firms as in the US). Their “criterion of action within their field is solely the public good as they understand it” (p. 288). Examples are the Bank of England (then technically privately owned), the universities, the Port of London Authority, “even perhaps the railway companies”; surely also the BBC.

“But more interesting than these is the trend of joint stock institutions, when they have reached a certain age and size, to approximate to the status of public corporations...” At a certain size, the shareholders become dissociated from management’s personal interest in making great profits. The stability and reputation of the institution become its primary

concerns. Examples given are a big railway or utility company, bank or insurance company (p. 289).

The behaviour of business firms has almost completely gone into reverse now. I blame ideology, economic theory and competition. The White Paper has nothing to say about this, naturally: their only criterion for evaluation of a business is its productivity.

There is, incidentally, a quite fine-grained map of average productivity throughout the country (BEIS, 2018: 218; from ONS, 2017). As you would predict, it is highest (coloured blue) in London and the south-east and also in Grampian (Aberdeen and North Sea oil, not even at its peak), and lowest (dark red – interesting choice of colours) in mid-Wales and the Shetland Islands. If you look closely you can just discern the darkest blue in – you guessed it – the City of London. Banking and finance are the most productive industries. They are not mentioned in the Paper; with that productivity, they need no Strategy. But what do they produce? Money. So did Midas.

In Book 4 the Inquiry looks at specific industries and their problems: oversupply and fragmentation of ownership in the coal industry, inadequacy of roads and housing, necessary improvements to electricity supply, waterways and docks, the needs of agriculture (including tenure issues) and forestry – industries chosen because there were serious problems for which solutions were posed.

No analysis of that kind appears in the White Paper. Its authors seem to have taken their starting-point not from looking at the range of business institutions, their governance, behaviours (they are not all scumbags) and industry-wide problems but from mainstream economic theory, which is more concerned with how the economy ought to work in some kind of ideal world than how it actually does so. It usually assumes the industrial form prevalent in the nineteenth century: businesses too small to affect prices by their own actions.

Open financial markets

Nowhere has competition been more misguided than in financial markets.

In Britain the rot set in well before neoliberalism took hold, beginning with the policy of Competition and Credit Control (1971). This set the banks up to compete with building societies, and now mortgages, formerly understood to be too long-term for institutions funded by sight deposits, dominate their loan books. The larger firms turned to internal finance and the capital markets for finance, leaving smaller businesses struggling. The Big Bang allowed retail banks to engage in investment banking, and Basel I reinforced the trend to mortgages by favouring collateralised lending. Banks kept down their Basel capital requirements by adopting mortgage-backed securities and other “structured products” (see Chick, 2008; 2013).

These events and the Acts which further deregulated the banks (for a thorough list see Siniscalchi, 2016) were amongst the factors that led to the financial crash. The banking regulator, then the Financial Services Authority, thought of competition in microeconomic terms: it would keep lending rates down and deposit rates up. They did not see the macro-disaster that competition was brewing up. Has this lesson not been learned? Competition can be good, and it can be bad. We must learn to discriminate. I’m with Keynes: “... let finance be primarily national” (1933), and, I would add, compartmentalised into non-competing groups.

Profit

On no topic was Keynes consistently more scathing than the use of profitability to assess the desirability of undertaking a project for its social benefit. Everybody knows the passage in *The General Theory* about burying bottles full of cash and digging them up again. Po-faced people took this as a genuine recommendation; they forgot the paragraph just before (and the one just after, but that is another story):

“It is curious how common sense, wriggling for an escape from absurd conclusions, has been apt to reach a preference for *wholly* ‘wasteful’ forms of loan expenditure rather than for *partly* wasteful forms, which, because they are not wholly wasteful, tend to be judged on strict ‘business’ principles” (Keynes, 1936: 129).

This had been a preoccupation for at least ten years:

“It is *not* a correct deduction from the principles of economics that enlightened self-interest always operates in the public interest. Nor is it true that self-interest generally *is* enlightened” (1926: 288).

“The nineteenth century carried to extravagant lengths the criterion of ... ‘the financial results’, as a test of the advisability of any course of action sponsored by private or by collective action. The whole conduct of life was made into a sort of parody of an accountant’s nightmare. Instead of using their vastly increased material and technical resources to build a wonder city, [they] built slums ... because slums, on the test of private enterprise, ‘paid’ ... We have to remain poor because it does not ‘pay’ to be rich. We have to live in hovels not because we cannot build palaces but because we cannot ‘afford’ them. We destroy the beauty of the countryside because the unappropriated splendors of nature have no economic value. We are capable of shutting off the sun and the stars because they do not pay a dividend” (Keynes 1933).

“It is the State ... which needs to change its criterion. It is the conception of the Secretary of the Treasury as the chairman of a sort of joint-stock company which has to be discarded” (*ibid.*).

Although there is no discussion of the difference between private and social return in the Yellow Book, it is clear that the Inquiry knew they are not at all the same – not least from their discussion of the “public concern”. Years of conservative Governments (small “c”, for I count the Blair years in) have eroded this knowledge.

The shopping list

If the White Paper is marked by an absence of analysis, it makes up for it in its proliferation of proposals. A quick perusal of the body of the White Paper reveals a bewildering list of commitments to a wide range of different projects, usually with a new organisation to deliver the policy. A more-or-less random dip produced the following examples:

- Total public expenditure on R&D to rise to £12.5bn in 2021-22, p. 67.

- Invest £725m in an Industrial Strategy Challenge Fund pp. 74-5.
- School Improvement Fund £280m p. 87.
- Cyber Discovery programme £20m, p. 109.
- Productivity Investment Fund £31bn p. 132.
- Transforming Cities Fund £1.7bn, p. 133.
- £2.5bn investment in low carbon technology by 2021, p. 144

I have not made a full list: it would be boring to compile and type and even more boring to read. I counted 80 examples in just over half the text before even I gave up. This is an approximate figure, for there are duplicates which I have tried to eliminate but almost certainly imperfectly, and I will have missed many examples. At the very least there should have been an appendix which brought all financial commitments together and lists all the new organisations which will be tasked to implement the Strategy.

The list is ordered, to give this mess some coherence, by categories described as five “foundations of productivity”, each of which “aligns” with one of the elements of their “vision”, in the same order. The categories are “ideas, people, infrastructure, business environment, places”. *Ideas* includes the focus on R&D and innovation, *people* captures their intention to invest in education in science, technology, engineering and mathematics (STEM) and re-skilling, *infrastructure* includes transport, housing and digital infrastructure, *business environment* refers to their extensive list of initiatives to foster innovative new industries and other “high potential” businesses; promote cooperation between business, government (including local authorities) and universities; and address productivity problems in small and medium-sized businesses (SMEs), and *places* refer in various ways to the attempt to establish and nurture industry in a less-centralised way.

Already when this scheme of thinking is introduced (p. 11), the shopping list makes an abbreviated appearance. After that, in the body of the text, it becomes unreadable to any but the most dogged or those with special interests. But you can see that they are proposing to take various initiatives to achieve low carbon output and other green objectives somewhat seriously, for example, and it is interesting what industries have attracted their support, either because they are already highly successful or because they are “cutting edge”: aerospace and the (mostly foreign-owned) motor car industry are examples of the first, driverless vehicles and battery technology are examples of the second.

Reading their objectives I am particularly worried about the fate of SMEs. Why does the report seem to associate high productivity with large firms? Have they looked at Carillion? – big, but actually they did nothing but bid for government and other large contracts; smaller firms, subcontracted, did all the work. In any case, productivity is important but it is not everything. To run a small business, making your own decisions, enjoying what you are doing and turning an adequate profit is to many people a satisfying life. SMEs are also said to be the source of many innovations – nothing on the scale of quantum computers or driverless vehicles perhaps but still a contribution. Big may be productive, but small can be beautiful. Will SMEs survive in Mrs May’s white heat of productivity?

A sample paragraph reads

“For the economy to realise the benefits of AI, the sector and the government will coordinate action on solutions to shared challenges and opportunities through an AI Council, a new government Office for Artificial Intelligence, an expansion of TechCity UK to become TechNation and a new GovTech Fund” (p. 200).

It must have taken an army of advertising copywriters to dream up these names. My favourite is the network of Catapults for different industries, to help commercialise new technologies.

As well as being presented under each category of contribution to productivity, proposals are grouped under four Grand Challenges. They pledge to:

“put the UK at the forefront of the artificial intelligence and data revolution maximise the advantages for UK industry from the global shift to clean growth become a world leader in shaping the future of mobility and harness the power of innovation to help meet the needs of an ageing society” (p. 34).

Now we can see clearly what I suspected when talking about the vision statement: that the purpose of the whole project is to aggrandise the State, not to help us live better, more fulfilling lives. They advocate AI, for example, not because robots can relieve us of some drudge jobs but to be *first*; clean growth not for the sake of clean air to breathe and water to drink, never mind saving the planet, but to capture gains for UK businesses investing in clean technology; to foster mobility not to make it easier for people to get about (and, incidentally, make them more productive), but to be a world leader in the future trajectory of its technology. Finally, in the fourth Challenge, we see a twinge of humanity – or do we? Is the ageing population (not society!) really just a testbed for new technology? Are we oldies not just a growing market being used for the good, first, of British industry and, through industry, the State? We might as well be put to some use, since it's illegal to kill us off. After all, we're not *productive*.

By contrast, the recommendations of the Inquiry are summarised in a chapter of 30 pages at the end of the book: “to press on with housing, road construction, electricity and the regeneration of agriculture”, to reform the governance of Public Boards (such as the Metropolitan Water Board, now defunct), to force large companies to publish their accounts and other information, to collect business statistics more frequently, to ensure that workers receive a just wage and a share of profits.

“The primary purpose of such a system [of profit-sharing] should be neither to encourage greater output nor to increase the earnings of the workers, though these results should incidentally follow; but to define the principles upon which the wealth created by a concern is divided and to give assurance that these principles are observed” (p. 199).

And so it goes. If the reader is interested in detailed recommendations, he or she will find quite a lot in “Can Lloyd George do it?”, a more accessible source (Keynes and Henderson 1929). Throughout the book, pragmatic policies are based on principles.

Conclusion

It is a pleasure to see Cinderella out and about and open for debate after so many years in seclusion. It is also a pleasure to find that the Government is last eager to spend some money. Some of the projects are imaginative and commendable, others, in my view, are not (HS2, fracking), but that is normal where preferences differ. There are important areas left out: health technology more generally - not just for the ageing population, for example. If, as they emphasise, education is important for productivity, so too is health.

However, one of the few principles in economics that I think holds good is opportunity cost. While this Government proposes spending serious sums of money on glamorous, cutting-edge technology, the NHS is in deep financial trouble, public libraries are closing, high streets have become uniform because only the big chains can afford the rates, set high for businesses because local authority budgets have been slashed. I have nothing against a successful economy: I wish we had one. But where are the tools of conviviality; the public spaces where children can safely go independently, what of subsidies to the arts – the things we need if we are to live “wisely, agreeably and well”.

Actually, “we”, the people, do not count in the thinking behind the White Paper at all.

I have not done justice to the richness and complexity of either document, but I hope I have done enough to illustrate the vast gulf between them in both style and substance. It doesn't take long quotations from of the White Paper to expose its style as a mixture of puerility, bombast and adspeak, after which the Yellow Book's writing style is a delight.

The two documents differ dramatically in what is considered appropriate to include in a document on industrial policy. Of course today's problems are different from those in 1928: the coal industry has disappeared, the issue of the planet's limited resources is now prominent, and so on. Some of the difference is explained by the fact that one is a government policy paper and the other similar to a manifesto (within a limited field) of a political party: the recommendations of the Yellow Book are not “priced” (for that, see Keynes and Henderson, 1929). And the Inquiry gave itself more space: 488 pages, excluding the index; the White Paper is half that length: 242 pages, excluding references and credits (there is a picture on almost every page). There is no (much needed) index. The Yellow Book was two years in the researching and writing; the White paper was knocked out in less than a year.

But it is the strong emphasis on underlying philosophy that recommends the Yellow Book as a review of industrial policy. At that level, the White Paper cannot even begin to compete.

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Putting the nation-state back in: public economics and the global economy

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Abstract

The project of creating a new public economics requires rejecting the custom of treating the international economy as an afterthought. What is needed is a return to what is arguably the great tradition in political economy, which has included Renaissance and early modern mercantilism, Enlightenment-era cameralism, the German Historical School, institutional economics and Schumpeterian or evolutionary economics. In this tradition, states as well as individuals and firms are actors in the international economy and zero-sum rivalries among states over relative power and global market share are central to public policy.

In this essay I draw on the enduring insights of this tradition of economic realism to analyze the central global economic phenomenon of our time--not the supposed creation of a free global market, something that hardly exists, but rather the rapid emergence in the last generation of global oligopolies and monopolies in industries with increasing returns to scale. Imperfect and oligopolistic global markets present challenges for national and transnational policymakers, but also opportunities which are not considered by conventional neoliberal thought and practice. These include opportunities for nation-states to negotiate directly with transnational firms, as well as the collaborative creation of transnational agencies to achieve collective goals.

What June A. Sekera calls “a new public economics” defending the legitimacy of “the public economy” or “the public non-market economy” is both necessary and overdue, as a reaction to the kind of neoclassical economics and neoliberal public policy that has sought to limit the legitimacy of government to corrections of market failures.¹¹⁷

The new public economics is particularly relevant to the subjects of national defense and technological innovation. All but the most extreme libertarians acknowledge the need for public provision of national defense, even if contractors are used for some functions. In the case of technological innovation, the defense sector has long acted as a venture capitalist or “entrepreneurial state” in Mariana Mazzucato’s phrase.

The problem is that conventional neoliberal economists and policymakers already recognize an exception to the rule of anti-statism in the case of defense and public funding for basic R&D. To succeed in its challenge to conventional market-supremacist economic thinking, a new public economics must go beyond arguing for a role for the public sector in areas like these. A new public economics needs to be rooted in the rival historical and institutional traditions of economic thought – what the economist Erik Reinert calls “the other canon”. These come in various forms, with national and regional differences – Renaissance and early modern mercantilism, Enlightenment continental cameralism, the German Historical School, the Old Institutional Economics, the neo-Schumpeterian or evolutionary economics tradition, and others. Arguably this rich braid of ideas is the mainstream tradition in Western and later global political economy, from which both classical economics and its offshoots, neoclassical economics and Marxism, are minor offshoots, however large they may loom today, especially in the English-speaking countries.

¹¹⁷ June A. Sekera, *The Public Economy in Crisis: A Call for a New Public Economics* (Springer, 2016).

To the extent that it forms a coherent body of thought, this Great Tradition differs from today's mainstream economics in three major ways:

Historicism. The economy is not a timeless, abstract realm governed by laws like those of physics but one of a number of social institutions embedded in particular states and interstate systems, which change radically over time.

Increasing returns. Rather than positing competitive markets with constant or diminishing returns and many competitors as the norm, the Great Tradition recognizes that, particularly in industrial economies, important sectors like manufacturing are characterized by increasing returns to scale and scope and network effects and imperfect markets in which monopolies and oligopolies can be efficient and innovative.

Power politics. Trade theory is an afterthought in conventional neoclassical economics, which assigns the state the role in trade of a mere umpire in a rule-based, preferably global market in which the only actors are individuals and firms. But in the Great Tradition of economic thought, competition among territorial polities (whether city-states, kingdoms, empires or modern nation-states and blocs) – not merely competition among individuals and private firms – has been a major driver of both technological innovation and technological diffusion over time.

From this it follows that it would be a mistake for the new public economics, in challenging today's academic orthodoxy, to share the tendency of much contemporary economics to treat the domestic economy in isolation from the international economy. Instead, it makes sense to treat domestic economics as a subset of global economics, and global economics as a subset of global power politics and diplomacy.

This suggestion sounds radical but it is obvious, on reflection. Conventional economic theory assumes the existence of modern national economies like those of North America, Europe and East Asia which interact in an international economy. But today's sovereign state system like today's global economy is a contingent result of titanic and bloody power struggles, which might have turned out differently and produced a radically different world order.

Why are there are nearly two hundred sovereign states in the world today, instead of a few empires or one global state? In 1900, most independent polities were the independent countries of the Americas, including the United States; the rest of the world was ruled directly or indirectly by a handful of European empires. Four dynasties – the Hohenzollerns, Hapsburgs, Romanovs and Ottomans – ruled parts of Europe and the Middle East and Eurasia which are now divided among many nation-states. The dissolution of Europe's dynastic and colonial empires was the result of the world wars and the Cold War. Today's world order reflects the fact that the two most powerful states in the second half of the twentieth century, the United States and the Soviet Union, favored decolonization. The proliferation of small, nominally sovereign states after 1945 might not have occurred had the Axis powers achieved their goal of a world divided among a few autarkic, hierarchical, racist empires – or even if Britain, France and other European colonial powers had emerged less weakened from the two world wars.

Today's highly integrated global economy is an even more recent creation than the post-colonial global states system. Until the 1990s, the world economy was divided among the U.S. and its military protectorates in the Triad of North America, Europe and Northeast Asia,

which formed a relatively liberal, integrated trade and investment bloc; the communist bloc; and post-colonial nonaligned nations, many of which practiced import-substitution industrialization (ISI) and managed trade. The simultaneous if far from complete liberalization of economies in the former communist bloc and the developing world transformed trade, investment and economic structure everywhere, including in the advanced industrial core. The rapid enlargement of both global consumer markets and workforces allowed the emergence of global oligopolies, through growth, merger or alliance. This was accompanied in the generation after 1989 by a restructuring of industry by means of offshore outsourcing, which took forms influenced by global labor arbitrage on the part of Triad-based firms and various kinds of state-sponsored development in nations like China and India and Brazil.

As this suggests, it is naive to debate the proper roles of “the government” or “the market” in the abstract, given the unstable and contingent nature of these institutions and the frequent changes in their nature driven by global events like hot wars, cold wars and revolutions. If a new public economics is to escape completely from the assumptions of the dominant neoclassical economic tradition, then the tradition in international relations theory of the primacy of foreign policy needs to be complemented by a view of the economy based on the primacy of international economics.

The geoeconomics of the bimodal economy

John Kenneth Galbraith’s idea of “the bimodal economy” deserves to be revived as a central concept in political economy. Galbraith contrasted the “market sector” characterized by constant or diminishing returns and a high degree of competition among small producers with the “planning sector,” characterized by imperfect markets with natural monopolies or oligopolies which replace many arm’s-length transactions with internal bureaucratic planning, which can either public or private forms.¹¹⁸ These efficient monopolies and oligopolies, based in increasing-returns sectors like manufacturing or sectors with network effects like infrastructure or telecommunications, are characteristic of what Joseph Schumpeter called “trustified” capitalism in advanced industrial economies. According to Schumpeter, technology-based, oligopolistic firms engage in “creative destruction,” defined not as mere price competition but as “industrial mutation,” the incessant creation of new products and services. Following Schumpeter and Galbraith, William Baumol argued that competition among oligopolies able to recycle innovation rents into unpredictable bursts of further innovation is the secret of success among contemporary capitalist economies – not the constant, incremental competition among many small firms described by neoclassical Econ 101.

While the modern theory of imperfect markets was developed in the first half of the twentieth century by Joan Robinson and Edward Chamberlin, the concept is far from new, as economic historians like Erik Reinert, Ha-Joon Chang and Michael Hudson have demonstrated. Reinert in particular has shown that the *bete noire* of the classical and neoclassical economics tradition, mercantilism, was often inspired by a sophisticated understanding of the importance of localizing high-value added production in increasing-returns industries. As Reinert has written:

¹¹⁸ John Kenneth Galbraith, *Economics and the Public Purpose*, p. 43; John Kenneth Galbraith, *The New Industrial State*, with a new foreword by James K. Galbraith (Princeton: Princeton University Press), xxxvii.

“It has previously been argued (Reinert & Daastoel 2004) that dynamic rents spread in the economy at three levels: 1) to the entrepreneur in the form of profit, 2) to the employee in terms of employment, and 3) through the government in terms of increased taxes. Under conditions of rapid technological change – as with the ‘productivity explosions’ of new technologies (Perez 2004) – this ‘triple level rent-seeking’ represents a hugely positive-sum game in the producing country. We argue that a core objective of mercantilism was achieving this ‘triple-level rent-seeking’. Institutions like patents, protection and apprenticeship, created 300 years before Adam Smith, and scientific academies, created almost a century before his writings, would help increase the size of the economic pie, increasing profits, the wage bill and the governments’ ability to tax.”¹¹⁹

Here Galbraith’s concept of the bimodal economy is helpful. Economic development, whether on the part of a city-state, a nation-state or a bloc, consists of creating and expanding the high-valued added/increasing returns sector – Galbraith’s planning sector – within what was formerly an agrarian, low-value-added economy.

The increasing-returns planning sector does not completely replace the market sector. Indeed, over time the relatively low-productivity service industries that are part of the market sector tend to absorb the workers shed as a result of technology-driven productivity growth in agriculture, manufacturing, infrastructure and clerical services.

While there are both military and civilian reasons to retain some kinds of high-value-added manufacturing within national economies, there is no reason to lament the long-term pattern observable in the U.S. and similar societies, in which production jobs are declining and most new jobs are being created in health care, education, and leisure and hospitality. This is exactly the pattern one would expect to see in a highly mechanized and automated economy. As technology lowers the price of food, appliances, staples and communications, even if incomes are mostly stagnant this frees more discretionary income which even working-class and lower-income individuals can spend on amenities, mostly in the form of quality-of-life services and tourism, rather than on more material goods (illustrating “Wagner’s Law,” named after the German economist Adolph Wagner). Whether, in the interest of social equality, some of these quality-of-life goods in the labor-intensive sector are “merit goods” which should be subsidized or provided by the public non-market economy, in order that all citizens may have access to them, is a question beyond the scope of this essay.

From geoeconomics to geopolitics

When we think of the global economy as a bimodal economy, the potential for interstate conflict is evident. Some forms of the transition from a premodern agrarian society to an industrialized society are limited to the territory – for example, replacing premodern with modern transportation, energy and sanitation and telecommunications grids. But if we superimpose a division of the economy into traded and nontraded sectors atop the division between the increasing-returns planning sector and constant-returns market sector, it

¹¹⁹ Erik Reinert, “How Rich Nations Got Rich: Essays in the History of Economic Policy,” Working Paper No. 2004/01 (University of Oslo: Center for Development and the Environment).

becomes clear that there is a high degree of overlap between the traded sector and the increasing-returns sector, particularly in the case of manufacturing.

Indeed, because the costs of manufacturing tend to fall with larger plant size and production runs made economical by larger markets, in theory an industrial complex in a single country, or a single firm with suppliers in multiple countries, could produce all of the aircraft or automobiles or mobile phones in the world, assuming an adequate supply of inputs like resources, energy and labor.

This would not be a source of conflict in a world with a single government or in a world of multiple sovereign states and perpetual peace. In the real world, however, there has always been intense international rivalry over national shares of industries in the global increasing-returns traded sector – partly for military reasons and partly for pure economic reasons.

Modern military power depends largely on the ability of nations or alliance to ramp up advanced industrial production within their borders of military goods for wars or arms races. This is chiefly a consideration for great powers and aspiring great powers.

Most countries cannot aspire to great power status, because of small populations or other constraints. But even countries that do not strive to be major military powers frequently seek to obtain and maintain shares of high-value-added industries, chiefly manufacturing, in the interest of economic development.

One reason is the terms of trade. If a country wishes to import high-value-added goods, it is easier to do so by exchanging modest quantities of other high-value-added goods rather than large quantities of low-value added goods. Here is an illustration, courtesy of Ha-Joon Chang.¹²⁰ With the Hat Act of 1732, the British government restricted hat manufacturing in its American colonies. The American colonists could not make their own beaver hats, but had to purchase them from British merchants, while the colonies exported beaver skins to British hat manufacturers. A great quantity of low-value-added beaver pelts was necessary to make the money to buy one high-value-added beaver hat. This explains the seeming paradox that, contrary to the Ricardian theory of international specialization among nations exchanging complementary products, most global trade is not only among advanced industrial nations, but also takes the form, among those industrial nations, of trade in similar kinds of high-value-added manufactured goods like electronics and automobiles, if not beaver hats.

It is possible to imagine, if only as a science fiction scenario, a wholly industrialized, urbanized world – a planet in which all societies have reached the stage that has been reached by the industrial democracies of North America, Western Europe and Northeast Asia. This possible future world economy would resemble today's Triad. Each bloc or major nation would both import and export manufactured goods and other high-value added traded sector goods, produced by small numbers of workers using advanced technology. Although the national traded sectors would employ relatively few workers, their access to global markets and scale economies realized by transnational firms would make them important as sources of taxes and local economic activities even in economies in which most people worked in the nontraded domestic service sector (whether for for-profit firms, non-profit agencies or the public non-market sector).

¹²⁰ Ha-Joon Chang, *Kicking Away the Ladder: Development Strategy in Historical Perspective* (Anthem Press, 2002)

This scenario, however, assumes peace – not only the absence of hostilities, but the kind of deep peace that exists between the U.S. and its dependent military protectorates in NATO and Northeast Asia. Absent that kind of deep and enduring peace, great powers and insecure lesser powers will inevitably limit international industrial and financial integration, in the interests of a degree of national military self-sufficiency.

The scenario also assumes that early-developing nations will voluntarily cede shares of the global high-value-added traded sector to late-developers as they catch up. In practice, advanced countries in every era have been extremely reluctant to do so.

As the first industrial great power in the mid-nineteenth century, Britain sought to lock in its advantages by monopolizing manufacturing and compelling other societies to specialize in non-industrial commodity production, so that Britain could enjoy a seller's market in high-value-added manufactured goods and a buyer's market in industrial inputs like cotton for textile mills and cheap imported food to lower British industrial labor costs. Britain carried out this strategy in two ways. One was coercion – direct coercion, in the form of conquest and colonialism, and indirect coercion, in the form of “unequal treaties” imposed at gunpoint on weaker societies. Another was evangelism – the British export of classical economics, which purported to be a scientific doctrine holding that countries should specialize along the lines of comparative advantage, a doctrine highly convenient to Britain at a time when it was the only major manufacturing economy.

The British attempt to monopolize world industry failed, because of the determination of the U.S., Bismarck's Germany and Meiji Japan, among other countries, to catch up by means of import substitution policies which reserved home markets for domestic producers while in some cases welcoming British foreign investment. After World War II, protectionism had ceased to serve the interests of U.S. industry. The United States, now the leading manufacturing power like Britain a century before, repented of its protectionist youth and began preaching free trade and treated the tariff as an abomination like slavery or genocide.

At first glance, the post-Cold War offshoring of much manufacturing by U.S. and other firms in the period of globalization would seem puzzling. Why would the U.S. deliberately deindustrialize itself? But for the most part American and European and Northeast Asian firms have merely offshored lower-value-added production to China and Mexico and other developed countries, keeping the higher-value-added links in supply chains at home. Most of the value of an iPhone, for example, comes from components from Japan, South Korea, Taiwan, the U.S. and Germany and other developed economies, with China's export-processing zones acting as low-wage assembly platforms. Most so-called “globalization” has merely been labor arbitrage, no different in kind than intra-national labor arbitrage like the transfer by American firms of manufacturing from high-wage, pro-union states to low-wage states with anti-union “right to work” laws.

Corporations and investors based in the Triad have been hostile to efforts by developing countries which seek to pursue strategies of state-sponsored industrialization of the kind that the U.S., Germany, Britain, Japan and the Little Tiger themselves pursued when they were catching up. Indeed, a central purpose of “multiregional” trade pacts like NAFTA and the failed TPP has been to deny developing nations the legal right to use the classic tools of import substitution – tariffs, local content requirements, forced technology transfer, and nontariff barriers. The very architecture of international trade treaties and trade law, even as it has displaced mid- and low-skilled First World industrial workers by enabling firms to engage

in global labor arbitrage on a massive scale, tends to lock in developing nations to the lowest rungs on global supply chains controlled and orchestrated by transnational firms based in the U.S., Europe and Japan.

Within the bimodal global economy, then, there tend to be two kinds of conflicts among state. First, there are horizontal conflicts among already-industrialized nations, particularly leading military powers, that compete for relative shares of the global increasing-returns traded sector. Second, there are vertical conflicts among developed nations, which would prefer that developing countries remain as cheap labor pools and sources of commodities, and some (not all) developing nation governments, which seek to use public policy to move their economies from lower-value-added to higher-value-added activities.

The bipartisan global geoeconomic strategy of the United States can only be understood in light of these dynamics. Since the end of the Cold War, in slightly different ways, the administrations of Bill Clinton, George W. Bush and Barack Obama have sought to lock in the geopolitical status of the U.S. as the dominant global military power, while using global trade treaties and institutions to lock in a global division of labor favorable to the advanced industrial countries of the core – all of them U.S. allies or protectorates – to the detriment of the long-term prospects of developing nations.

The first objective – securing American global geopolitical hegemony in a unipolar world – has been the goal of the expansion of NATO into the territory of the former Warsaw Pact. Turning the Greater Middle East, a zone contested by the U.S. and the Soviet Union during the Cold War, into an American sphere of influence has also been the unstated objective of most of the wars the U.S. has fought in the region, only two of which – the invasion of Afghanistan and the campaign against ISIS in western Iraq and Syria – could be plausibly justified by reference to post-9/11 jihadist terrorism.

Maintaining perpetual U.S. military protectorates over Europe, Japan, South Korea and Taiwan is justified by what the administration of George Herbert Walker Bush called “reassurance”. This is the idea that in the absence of a permanent U.S. security umbrella, the nations of Europe and East Asia would rearm and engage in dangerous internecine rivalries. Instead, the Germans and Japanese among others outsource their protection to the U.S. and specialize in the pursuit of civilian manufacturing.¹²¹

This strategy for American hegemony is not without significant costs to Americans. To begin with, there are the costs of the wars and arms races engaged in by the U.S. in the “near abroads” of Europe and Northeast Asia, in its role as protector of a vast bloc, rather than merely North America or the U.S. In addition, the deal offered by the U.S. to its former enemies Germany and Japan, a deal made in the Cold War and renewed afterwards – “Make cars, not wars” – has required the U.S. to turn a blind eye to the mercantilism of allies, even when U.S. industrial capacity is eroded, in the interest of harmony in the Pax Americana and the dubious benefits of the dollar as the global reserve currency. U.S. military and diplomatic officials routinely argue against American retaliation against the policies of allies that hurt American industry. As a result, within the American-led Triad, the U.S. runs chronic merchandise trade surpluses with Germany, Japan, South Korea, and other allies. And the U.S. share of global manufacturing output is smaller than one would expect from its scale, while the shares of Germany, Japan and the Little Tigers are greater.

¹²¹ Michael Lind, *The American Way of Strategy* (Oxford University Press, 2006).

The second objective – making the world economy safe for firms based in the U.S. and its European and Asian allies – has been the goal of American economic policymaking until recently. Having used infant-industry tariffs, subsidies, procurement policies and other techniques of state capitalism to become the world’s dominant economy by the mid-twentieth century, the U.S. sought to use its clout as the sole surviving superpower after the fall of the Berlin Wall to outlaw these and other measures, to prevent developing countries from using them to catch up. So-called multiregional trade pacts, like NAFTA and the Trans-Pacific Partnership (TPP) are called “free trade treaties” but they have little to do with liberalizing cross-border trade in finished goods. They are not treaties in the traditional sense but a kind of transnational legislation. Their purpose is to remove the power of national governments to shape their own economies by writing detailed laws and regulations into the fabric of treaties which can be amended only with difficulty and which can be enforced by private corporations suing signatory states (investor-state dispute settlement or ISDS provisions). The TPP in particular was an attempt to replace laws in many developing Asian nations with regulations drafted by lobbyists for U.S. pharma and financial lobbies and tech lobbies, illustrating, in the international arena, James K. Galbraith’s concept of “the predator state.”¹²²

From global market to global public economy

Multiregional trade pacts can be seen as a kind of transnational governance in the absence of a single overarching sovereign government. The fact that they have been warped by special interests – in particular by large multinational firms and financial institutions – does not mean that they should be rejected as an instrument of diplomacy.

Nor do abuses of their power and influence by multinational corporations mean that they cannot serve constructive purposes. While large multinational firms may have too much political influence, most of them exist because they benefit from genuine economies of scale or scope or network effects. Breaking up most large corporations into smaller ones, as champions of radical antitrust propose, or pushing them entirely back into the Procrustean bed of national borders, the preferred strategy of nostalgic protectionists, would sacrifice genuine dynamism and efficiency.

Another approach, favored by many progressives, would preserve the neoliberal approach of creating transnational legal and regulatory regimes, but make the regimes more favorable to workers and the environment, instead of being skewed toward Triad-based firms and financial institutions, as they are now. Quite apart from the political difficulties – if it is possible to take over the rule-writing process, why haven’t labor representatives and environmentalists done so by now? There is the problem that this kinder and gentler version of transnational rule-based governance sacrifices national sovereignty as much as does the familiar version.

Another alternative is suggested by John Kenneth Galbraith’s description of the increasing-returns sector as “the planning sector”, in which many activities within the firm (and nowadays among many actors in supply chains) are coordinated by a centralized private bureaucracy. The global traded sector is a very imperfect market, to the extent that it is a market at all. It is best thought of as a collection of giant oligopolies or monopolies, which are “price makers” not

¹²² James K. Galbraith, *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too* (The Free Press, 2008).

“price takers,” and which engage in somewhat less-than-cutthroat rivalry – what Schumpeter called “corespective competition” and what others have called “co-opetition”.

By its very nature as a collection of a small number of large, complex, highly-bureaucratized enterprises, the global traded sector lends itself to deviations from classic notions of the free market, including in different eras cartels, consortiums and the participation of companies that are partly or wholly owned by the state. These deviations from free market ideals in the international realm were more tolerated by states before the age of neoliberalism that began in the late twentieth century.

For example, between World War I and World War II many European and American firms participated in international cartels, like the Phoebus cartel in light bulbs. Most European governments at the time took a lenient attitude to such cartels, as did the U.S. as long as the activity took place outside of the American market. In imperfect markets – the norm in manufacturing – such cartels arguably can prevent “ruinous competition” in which the prices of rivals fall below fixed costs, and can also establish a degree of certainty allowing longer-term private R&D. Following 1945, unfounded claims that fascism somehow resulted from monopolies and cartels and the influence of U.S. antitrust laws made cartels fall into disfavor on both sides of the Atlantic. But for national security reasons the U.S. government quietly supported a western-dominated global cartel in oil up until the Arab oil embargo in 1973.

There is also a rich if neglected history of transnational public agencies. Telstar 1 and Telstar 2, the first satellites to relay television, telephone calls and telegraph images, were created by a multinational consortium including the publicly-regulated private U.S. telephone monopoly AT&T, NASA, a government agency, and the British and French national postal and communications agencies. A similar model was followed by the establishment of the agency that coordinates Internet names, the Internet Corporation for Assigned Names and Numbers (ICANN), created as a nonprofit agency in 1998 and sharing its functions with the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce until 2016, when its oversight was transferred to multinational stakeholders.

Here is a contemporary example. In 2016 four multinational corporations – Akzo Nobel, DSM, Google and Philips – formed a consortium which entered into an agreement to buy enough wind-based renewable energy from two cooperatives in Zeeland and Goeree-Overflakkee in the Netherlands to power 100,000 Dutch households per year.¹²³ As this suggests, international economics can include complex deals among different kinds of organizations, not merely conventional market activities.

In neoliberal ideology, markets are presumed to be better than governments and other organizations. It is thought to be preferable to promote a public purpose by creating a market with certain rules and incentives and then encourage private firms to compete. But this is a relatively recent consensus and one which deserves to be overturned. For certain international purposes, creating a transnational organization – a private consortium, a public corporation, a nonprofit agency, a hybrid public private entity – and allowing sovereign governments working together to oversee and direct it might be better than trying to motivate numerous small, for-profit actors to achieve the desired end by means of rules.

¹²³ Alexander Stark, “Multinational Consortium Forms Energy Partnership,” October 19, 2016, Worldwide Process, <https://www.process-worldwide.com/multinational-consortium-forms-energy-partnership-a-554777/>

It is also worth rethinking the idea of a rule-governed global trading system, in light of the growth of transnational production. It is estimated that between a third and a half of cross-border “trade” actually consists of the movement of components and other inputs within transnational supply chains coordinated by a single firm, the systems integrator or “original equipment manufacturer” (OEM). These firms also tend to be the largest sources of private foreign direct investment in developing nations.

Developing nations that seek to attract multinational firms to invest in their countries and transfer skills and technology to their citizens are more accurately described as being engaged in economic development rather than trade in the traditional sense. Economic development strategies with the goal of encouraging direct investment by corporations have long been used by American states and other sub-units in federal nations. Some economic development strategies are limited to the basics – favorable tax climates, useful infrastructure, educated (or in some cases low-wage) workforces. But in many cases, state governments and municipal governments negotiate directly with individual corporations, providing incentives to specific firms to locate facilities or headquarters in their jurisdictions, in return for commitments, like creating an agreed-upon number of jobs.

As in all cases of bargaining, the result can be beneficial to both sides or exploitative, depending on the relative bargaining power of the parties. The salient point is that a world economy with imperfect markets dominated by a small number of global oligopolies arguably lends itself better to a system of direct bargaining among a few large firms or agencies and nation-states or multinational blocs than it does to a comprehensive rule-governed system, if the purpose of the rule-governed system is to govern a competitive market with many, mostly small producers which does not in fact exist.

In aircraft manufacturing, for example, there are only two large-jet manufacturers, Boeing and Airbus. It makes sense for countries that want to participate in the industry to cut deals with one or both of these firms, rather than try to create their own redundant and expensive national champions at great cost.

A one-size-fits-all rule-governed global trading system, then, is not necessary to the extent that development can be promoted by direct negotiations among particular states and particular large global firms. Indeed, a rule-governed global system is likely to be harmful to developing countries, if, like recent multiregional trade pacts, the rules are written by the most powerful and well-connected special interests in the developed nations. Far better is a global economic system which allows sovereign states – including small and poor ones – maximum discretion in deciding whether, and how, to participate in international trade and investment in the interest of their own citizens and their own economic strategies.

Conclusion

Returning to the centuries-old Great Tradition of economic thought requires us to abandon neoliberal orthodoxy when it comes to international trade and development, as well as domestic policy. For the Great Tradition embodied in Reinert’s other canon, the purpose of both foreign and domestic economic policy is the encouragement of productivity growth to enhance the prosperity and security of particular polities, not minimizing prices for consumers in the short term at the expense of the community’s safety and collective productive capacity.

As Alexander Hamilton, Friedrich List and 20th-century dependency theorists recognized, premature free trade and market integration among developed and developing countries tends to forestall the economic development of the latter, limiting them to the role of suppliers of commodities and cheap labor to their already-industrialized trading partners.¹²⁴ The experience of “shock therapy” in former communist countries and post-Cold War globalization confirms this analysis. The developing countries that have done the best have been East Asian nations like China with strong states able to dictate the terms of their relations with multinational corporations and international investors.

The alternative to premature globalization is to encourage industrialized countries with comparable industrial structures and living standards and wage levels to form gradually expanding, mutually-beneficial trading blocs, which developing countries can join once they have used infant industry protectionism, state capitalism and other methods to catch up. Development should precede liberalization. In the words of Reinert:

“Writing in the United States, Friedrich List already foresaw this development around 1830: some time in the future, when the United States had industrialized after a century of protection, when its population had reached 100 million, and its navy was the most powerful in the world, then, the period would come when the United States would proclaim free trade to the world (Reinert 1998). It is impossible to understand Friedrich List’s work without seeing that his ‘mercantilism’ was only a mandatory passage point towards free trade, which would be desirable when a symmetrical situation had been created in which all nations have a comparative advantage in dynamic, increasing return activities.”¹²⁵

From this perspective, the merger of the comparably advanced U.S. and Canadian economies with the European Union could be beneficial for all sides, but not the premature merger of advanced economies with low-wage economies like Mexico and China, which permits corporations in the industrial core to engage in race-to-the-bottom labor arbitrage while seeking to forestall the development of indigenous rivals. A multinational trading system in which low wages are treated as a source of national comparative advantage and high wages as a national handicap is perverse and harmful and needs to be replaced.

Another lesson of what I am calling the Great Tradition of political economy is that the mixed economy, not the market economy, has been and will continue to be the historic norm. Government in the form of defense spending, social insurance and public education accounts for a third of the economy in most advanced industrial nations, including liberal ones like the U.S. and U.K. In addition, there are substantial non-profit sectors and what the economist Neva Goodwin calls the “core economy” or household sector, in addition to the for-profit private sector.

Why should the mixed economy be limited to the domestic realm? The global economy could be organized as a mixed economy, as well. The possibilities, as we have seen, are not limited to private international trade and investment, supplemented by government-to-government aid and non-governmental organization (NGO) charity. A greater amount of international economic activity could take place under the auspices of multinational institutions which are

¹²⁴ Roman Szporluk, *Communism and Nationalism: Karl Marx versus Friedrich List* (Oxford University Press, 1988).

¹²⁵ Reinert, *ibid.*

ultimately accountable to democratic governments but which take a variety of forms tailored for particular purposes. The fact that many institutions in the last generation, like the World Bank and IMF and the European Union, have been captured and warped by economic elites for selfish purposes does not discredit the idea of transnational economic institutions as such.

The rediscovery of the public economy cannot be complete without rethinking approaches to the global economy. To be relevant and constructive in the 21st century, economics needs to be treated once again, not as the study of markets assumed to be independent of states, but as a branch of practical statecraft.

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The entrepreneurial state: socializing both risks and rewards

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Abstract

The paper looks at the way the state is understood in traditional economic theory, as limited to “fixing markets” and to “enabling” or de-risking the private sector. These assumptions are based on a limited understanding of value creation, as only happening within business organizations. Value is understood as being enabled or redistributed by the state, but not co-created by it. In truth, the state has often actively co-shaped markets, and taken high risks, before the private sector was willing or able. This is especially true in the innovation economy, where individual entrepreneurs and companies are mythologized as being the only risk-taking wealth creators. Understanding the market shaping and co-creating role of the state requires recognizing that public actors are also risk-taking investors, and the implication of this for how rewards are shared between public and private actors. A market shaping role of public policy, which also allows risks and rewards to be socialized, can better enable growth to be both “smart” (innovation-led) and also more inclusive.

1. Introduction

How should the wealth that an economy generates be distributed? Moral as well as economic arguments about who should be entitled to what – whether paid in wages, retained profits, or dividend payments – frequently seek to link rewards to contributions, for reasons of fairness or efficiency. But how these contributions are quantified depends first on how they are theorized. In this way, different theories of how value is created can be used to justify very different distributions of income and wealth. If entrepreneurs are believed to make extraordinary contributions to value creation, then maybe extraordinary rewards are justified? If hedge fund managers really do create more wealth than small nations, then might their initial rewards be both efficient and fair? In this paper we argue that the contribution to value creation by the state – the different parts of the public sector – has been problematically theorized. Understating the contribution of the state has meant that the contribution of other actors has been overstated, with consequences for the overall distribution of income and wealth. It has also meant that the full potential of the state to drive both innovation-led and inclusive growth has not been realized. But with a new approach to policy, it could be.

Key to the problem is that in economic theory the state is, at best, seen as facilitating the process of wealth creation, but not being a key driver of the process itself. In microeconomics, it is seen as *fixing* markets, not creating them. In industrial-innovation economics, its role is limited to spending on public goods like science or infrastructure and de-risking the activities of innovators, and does not extend to being an innovator itself. In macroeconomics, it is seen as fixing the business cycle and as a lender of last resort. It is not seen as a lead risk-taker across the business cycle or an *investor* of first resort. And if or when a public agency does dare to make strategic choices and take risks, it is often accused of crowding out the private-sector actors, or of being too inept to “pick winners”.

This limited view of the role of the state in the dynamics of wealth creation has had three problematic effects. First, it has limited policymakers’ understanding of the range of tools and

instruments they have for catalysing growth, often choosing to sit on the sidelines, “levelling” the playing field. Second, it has reduced the confidence of the public sector, making it more vulnerable to being captured by vested interests, and “rent-seeking” behaviour. Third, it has increased inequality by allowing some actors to exaggerate their role in creating wealth, and extract value well beyond their contribution to its creation.

The paper argues that a better understanding of the role that the state has and can play in the wealth-creation process is the starting point for policy solutions that can increase the rate of wealth creation, while reducing rent-seeking and ensuring a fairer distribution of that co-created wealth. Meeting the challenge of inequality requires less a redistributive state and more an *entrepreneurial state* (Mazzucato, 2013) or, as Rodrik has argued, shifting the focus from a “Welfare State to an Innovation State” (Rodrik, 2015). This is the way to create innovation-led growth which is also more inclusive growth.

The paper is organized as follows. Section 2 reviews the economic and political thinking behind the depiction of the state as simply a market-fixer. It also looks at the role that public choice theory has had in focusing on *government failure* as an even greater problem than market failure. Section 3 presents an alternative view of the state as market-maker, drawing on the work of Polanyi, Keynes, as well as the neo-Schumpeterian literature that has emphasized the role of public investments in driving innovation, not just facilitating it. This section concludes with examples of public-sector wealth creation. Section 4 looks at the other side of the coin: government investments that have led to failures. In doing so, it considers the need to understand failure in two ways: (1) as part and parcel of the investment and innovation process; and (2), failure that arises from instances where the state is captured by vested interests, which make money simply by moving around existing wealth, not creating new wealth. In cases where the public sector is not captured and is producing new value, section 5 considers how that value might be better distributed if it is understood as having arisen from a collective co-creation process where the tax-payer has also played a lead role. Section 6 concludes.

2. The state as *market-fixer*

The idea that the state is at best a fixer of markets has its roots in neoclassical economic theory. But this view has hardened in recent years as a result of an ideological political project against the state. We review both perspectives briefly.

Based on Arrow’s first fundamental theorem of welfare economics (Arrow, 1962), when markets are complete, competitive, and operating in equilibrium, they are taken to be the most efficient allocators of resources. But these conditions are rarely obtainable, and five broad categories of “market failure” which justify government “intervention” have been identified: (1) coordination failures, including inter-temporally through the operation of the business cycle, making it difficult to coordinate expectations and preferences (Stiglitz, 1974); (2) public goods such as clean air or new knowledge arising from basic research; (3) imperfect competition, whether arising from natural monopolies, network effects, or economies of scale; (4) information failures, leading to adverse selection, moral hazard, or high transaction costs (Stiglitz and Weiss, 1981; Coase, 1960); and (5) negative externalities such as traffic congestion or climate change (Stern, 2007). Government intervention is justified when any of these conditions exist.

If government is viewed as, at best, a fixer of market failures, at worst it is seen as an impediment to growth, given its natural tendency towards corruption, of capture by the lobbying of specific business interests, inefficiency, and the risk its actions will crowd out other private actors (Friedman, 1979) and will be constantly vulnerable to lobbying of specific business interests (Krueger 1974; Falck, Gollier and Woessmann, 2011). In this caricature, governments are Hobbesian leviathans, sucking dry the dynamic energy of the market, and an ever-present threat to the creativity and dynamism of the private sector (Phelps, 2013). Market failure is therefore a necessary but not sufficient condition for governments to act (Wolf, 1988). There is a trade-off between two inefficient outcomes – one generated by markets, and the other generated by “government failures” from intervention. The benefits of acting must outweigh the costs that may arise from these risks of “government failure” (Tullock, Seldon and Brady, 2002).

In this dominant view, government’s main role is to set the rules of the game and to keep them working (the rule of law); fund basic public goods such as infrastructure and education; “level the playing field” so that industry and competition can thrive (through competition rules or support to new firms in order to compete with incumbents); and devise market mechanisms to internalize external costs (e.g. pollution) or benefits (e.g. herd immunity). If and when the public sector does more than intervene in areas characterized by market failures, it is deemed to be causing different types of problems, such as: (1) crowding out the private sector; (2) government failure due to the inability of the state to “pick winners”; and (3) government failure due to the state’s inevitable vulnerability to capture by rent-seeking private interests (Buchanan, 2003).

Although scepticism about the role of government dates back to the first developments of philosophy, and later, economics, the strict modern formulation of the limits to government can be traced to the rise of New Public Management theory, which grew out of Public Choice theory in the 1980s. This perspective has been used to convince governments that the way they can be less burdensome is to emulate the private sector as much as possible (Buchanan, 2003). Judt (2011) has shown how the dismantling of the welfare state, a political project that began with Reagan and Thatcher in the late 1970s–early 1980s, co-evolved with this theoretical framework. And Jones (2014) shows how the neo-liberal agenda was underpinned by the view of the state as an inept and constantly captured entity. These trends have led to an undermining of confidence in the positive power of public institutions, and an increasing outsourcing of government functions to the private sector: it is surely easier to get business to act like business than for government to do so (Crouch, 2016).

This view of government also has its roots in the way that output is measured in both macro- and microeconomics. Government typically exists in macroeconomic theory, as a redistributor of the wealth that is created by companies, and an investor in some basic public goods like infrastructure, basic research, and education. It normally exists only in macroeconomic models that look at the effect of regulation or investment at the aggregate level. And it is totally missing from the microeconomic *production function*, where value is created. In microeconomics, total output is understood in terms of the (marginal) productivity of labour, capital, and technology inputs. The production function posits the relationship between the output that a company produces and the various inputs it uses, including labour, machinery, and technology. Yet this view disregards the enormous government inputs that have created both the human capital and the technology that enter the production function, as well as the early stage high-risk financing that innovative companies require. In essence, in standard

microeconomics, government is ignored, except for its role in regulating the prices of inputs and outputs, and fixing market failures of different types.

3. The state as *market-maker*

The history of capitalism tells us a different story – the story of a state that has often been responsible for actively shaping and creating markets, not just fixing them. Indeed, markets themselves should be viewed as outcomes of the interactions between both public and private actors (as well as actors from the third sector, and from civil society). In his seminal work, *The Great Transformation*, Karl Polanyi (1944) describes the role of the state in forcing the so-called free market into existence: “the road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism” (p. 144). Polanyi’s perspective debunks the notion of state actions as “interventions”. It is rather one in which markets are deeply embedded in social and political institutions (Evans, 1995), and where markets themselves are outcomes of social and political processes. Indeed, even Adam Smith’s notion of the free market is amenable to this interpretation. His free market was not a naturally occurring state of nature, “free” from government interference. For Smith the free market meant a market “free from rent”, which requires much policymaking (Smith, 1776).

And yet within economic theory, there is an absence of words to refer to the ways in which the actions of public institutions (visions, investments, and regulations) contribute to value creation, not only its fixing-up, or its distribution. Polanyi’s analysis is not only about the way that markets form over the course of economic development. It can also be applied to understanding the most modern form of markets, and in particular those driven by innovation. Some of the most important general-purpose technologies, from mass production, to aerospace, and information and communications technology, trace their early investments to public-sector investments (Ruttan, 2006; Block and Keller, 2011). Indeed, all of the technologies which have made Apple’s i-products (iPhone, iPad, etc.) “smart” were initially funded by public-sector institutions: the internet by the Defense Activated Research Projects Agency (DARPA); global positioning system (GPS) by the US Navy; touchscreen display by the Central Intelligence Agency (CIA); and the voice-activated personal assistant Siri by DARPA again (Mazzucato, 2013).

Key to understanding the implications of these histories is that public investments in the areas named above were not limited to simply funding “basic” research, a typical “public good” in market failure theory (Arrow, 1962; Nelson, 1959). In the US, for example, government agencies funded areas along the entire innovation chain: both basic *and* applied research and, in many cases, provided downstream early stage high-risk finance to companies deemed too risky by the private financial sector.

For example, in its early years, Apple received \$500,000 from the Small Business Investment Corporation, a financing arm of the US government (Audretsch, 2003). Likewise, Compaq and Intel received early stage funding to set up the companies, not from venture capital but from the public Small Business Innovation Research (SBIR) programme. This programme has been particularly active in providing early stage finance to risk-taking companies – more so than private venture capital (Keller and Block, 2013). Indeed, while it is a common perception that it is private venture capital that funds start-ups, evidence shows that most high-growth innovative companies receive their early stage high-risk finance from public sources, such as

Yozma in Israel (Breznitz and Ornston, 2013); venture funds in public banks (Mazzucato and Penna, 2016); and the SBIR programme funds in the US (Keller and Block, 2013). Although venture capital entered the biotech industry in the late 1980s and early 1990s, all the heavy investments in this sector occurred in the 1950s, 1960s and 1970s – and were mostly made by the state (Lazonick and Tulum, 2011; Vallas, Kleinman and Biscotti, 2011). Indeed, around 75 percent of the most innovative drugs on the market today (the so-called “new molecular” entities with priority rating) owe much of their funding to the public US National Institutes of Health (NIH) (Angell, 2004). Since 2000, the NIH has invested more than \$400 billion (2013 dollars) in the biotech-pharma knowledge base, and \$29 billion in 2013 alone.¹²⁶ These “mission-oriented” institutions (Mazzucato, 2017/2018b; Mowery, 2010; Foray, Mowery and Nelson, 2012) actively created new industrial and technological landscapes.

This pattern is being repeated in renewable energy, where the US government has been behind some of the most important advances through innovation in agencies such as the Advanced Research Projects Agency–Energy (ARPA-E), the sister organization of DARPA in the Department of Energy, as well as the recent revolution in fracking to extract shale gas (Trembath et al., 2012). And the Chinese government is today the largest global funder of green innovations (Mazzucato and Semieniuk, 2016). In all these cases – from ICT to health and energy – it has been these early direct public investments that have prepared the ground, creating and shaping new landscapes that businesses develop only later.

Such market-shaping also occurred through *demand pull* instruments, from government procurement policy (e.g. the state as a massive purchaser of semiconductors in the early stages, contributing to a fall in costs), as well as bold policies to shape consumer demand, such as suburbanization, allowing the impact of the mass production revolution to become fully deployed and diffused across the economy.

Should the public sector do everything? Of course not. The point is not that the private sector is unimportant, but that in new sectors like biotechnology, nanotechnology, and the emerging green economy, private businesses have tended to invest only *after* returns were in clear sight. The animal spirits of business investors are themselves an endogenous function of public investment, roused only after public investments have laid the groundwork in the highest-risk and most capital-intensive areas. This role of public investment is recognized in terms of the “basics”, such as infrastructure (without roads, businesses would have no way of transporting goods) and protecting private property. But beyond that it is largely ignored

4. Government failures

Of course the story is not always a positive one. While the examples above focus on public investments that have led to important successes (e.g. the internet, GPS, shale gas, blockbuster drugs), there are also government investments that end in failure. These include investment in products like the Concorde aircraft, which ultimately failed commercially; in the discovery of new drugs (of which most attempts fail); or the provision of guaranteed loans to companies which then might go bankrupt. An example of the latter includes the guaranteed loan of \$528 million provided by the US Department of Energy to the company Solyndra for the production of solar cells. This was followed by the company’s bankruptcy when the price

¹²⁶ http://officeofbudget.od.nih.gov/approp_hist.html

of silicon chips fell dramatically, leaving the taxpayer to pick up the bill (Wood, 2012). Any venture capitalist will argue that attempts to innovate require exploring new and difficult paths, and that occasional failure is part of that journey. Indeed, a similar guaranteed loan (\$465 million) was provided to Tesla for the development of the Model S electric car – which led to success. This *trial-and-error* process, in which tolerance of failure is also the road to success, is accepted in the private sector, but when governments fail this is regarded as a sign of incompetence, often leading to accusations of the government being unable to “pick winners”. As a result, public organizations are frequently told to stick to “levelling the playing field”, and to promote competition without “distorting” the market by choosing specific technologies, sectors, or companies to invest in (Owen, 2012). Yet this ignores our first point that markets are outcomes. And they have historically been outcomes of government playing a lead role: none of the great advances of the twentieth century would have occurred without public investment.

There are, nevertheless, good reasons to worry about government failures outside this natural trial-and-error explorative process. These reasons arise from situations where “rent-seeking” behaviour in the business community leads to government being captured by vested interests (Tullock, Seldon and Brady, 2002). Rents arise when value is extracted through special privileges (Krueger, 1974), and when a company or individual grabs a large share of wealth that would have been produced without their input (Stiglitz, 2012 p. 32). The idea is that profit-maximizing firms are likely to try to increase their profits through special policy-related favours, and this often leads to success on their part because politicians and policymakers are seen as naturally prone to corruption. Rent-seeking could arise from specific companies, or sectors, seeking extra funding from government through either a subsidy or a tax credit of some sort. Such concerns are valid. But these problems become more acute precisely when there is not a clear view of government value. If the state is seen as irrelevant, it will over time also become less confident, and more easily corruptible by different actors who call themselves the “wealth creators”. It is these actors who can then convince policymakers to hand out favours in order to increase wealth.

Furthermore, some rent-seeking may occur precisely as a result of the problematic assumptions regarding the role of public investment. If private investment is driven by perceptions of future opportunities in a sector, and if those opportunities are highly correlated with direct public investments that create markets into which business investment later moves, then policy tools which are overly focused on indirect support to business (e.g. via tax incentives) will create far less additionality. That is, they will not make things happen that *would not have happened anyway*. They may increase profits (through a reduction of costs), but not investment. And the primary objective of the policymaker should be to increase business investment, not profits. In this sense, such policies can lead to rent-seeking outcomes, even if there were no explicit “rent-seekers”: they result in a company or individual earning income without having generated any wealth.

An example is the way in which the private equity and venture capital community successfully persuaded governments in the US and Europe of their wealth-creating potential, and of the need to reduce capital gains to make this happen. In the US, capital gains tax fell by 50 percent in five years at the end of the 1970s as a result of pressure from the National Venture Capital Association (Lazonick and Mazzucato, 2012). As the US investor Warren Buffett put it, such policies do little for investment, which is driven by expectations of growth opportunities, or what he calls “sensible” investments, while increasing job destruction and inequality (Buffett, 2011).

Once we admit that the state has been a market-shaper and creator, a lead investor, and a risk-taker, the next question is how to make sure that policy leads not only to the socialization of risks but also of rewards. A better realignment between risks and rewards, across public and private actors, can become a concrete way to allow smart, innovation-led growth to also become inclusive growth. We turn to this in section 5.

5. Socializing risks and rewards

In ignoring the entrepreneurial role of the state as lead investor and risk-taker, and focusing only on the role of the public sector as setting the background (horizontal) conditions, orthodox economic theory has also ignored the way in which the socialization of risks should be accompanied by the socialization of rewards. Indeed, the more downstream the public investments in particular technologies and firms, the higher the risk that one of those technologies or firms will fail. But this is indeed normal, as any venture capitalist would admit: for every success there are many failures. In reality, the most successful capitalist economies have had active states that made risky investments, some of them contributing to technological revolutions. The Finnish public innovation agency, SITRA, has had some great successes, but also some failures. Likewise, Israel's public venture capital fund Yozma. In the Anglo-Saxon economies public debate has been too quick to criticize public investments when they go wrong, and too slow to acknowledge the state's role in those that succeed.

But this then raises a more fundamental question: how to make sure that, like private venture capital funds, the state can reap some return from the successes (the "upside"), in order to cover the inevitable losses (the "downside") and finance the next round of investments. This is especially important given the path-dependent and cumulative nature of innovation. Returns arise slowly; they are negative in the beginning and gradually build up, potentially generating huge rewards after decades of investment. Indeed companies in areas like ICT, biotechnology, and nanotechnology had to accept many years of zero profits before any returns were in sight. If the collective process of innovation is not properly recognized, the result will be a narrow group of private corporations and investors reaping the full returns of projects which the state helped to initiate and finance.

So who gets the reward for innovation? Some economists argue that returns accrue to the public sector through the knowledge spillovers that are created (new knowledge that can benefit various areas of the economy), and via the taxation system due to new jobs being generated, as well as taxes being paid by companies benefiting from the investments. But the evolution of the patenting system has made it easier to take out patents on upstream research, meaning that knowledge dissemination can effectively be blocked and spillovers cannot be assumed. The cumulative nature of innovation, and the dynamic returns to scale (Nelson and Winter, 1982), means that countries stand to gain significantly from being first in the development of new technologies. At the same time the global movement of capital means that the particular country or region funding initial investments in innovation is by no means guaranteed to reap all the wider economic benefits, such as those relating to employment or taxation. Indeed, corporate taxation has been falling globally, and corporate tax avoidance and evasion rising. Some of the technology companies which have benefited the most from public support, such as Apple and Google, have also been among those accused of using their international operations to avoid paying tax (Johnston, 2014). Perhaps most importantly, while the spillovers that occur from upstream "basic" investments, such as

education and research, should not be thought of as needing to earn a *direct* return for the state, downstream investments targeted at specific companies and technologies are qualitatively different. Precisely because some investments in firms and technologies will fail, the state should treat these investments as a portfolio, and enable some of the upside success to cover the downside risk.

In particular, there is a strong case for arguing that, where technological breakthroughs have occurred as a result of targeted state interventions benefiting specific companies, the state should reap some of the financial rewards over time by retaining ownership of a small proportion of the intellectual property it had a hand in creating. This is not to say that the state should ever have exclusive licence, or hold a large enough proportion of the value of an innovation to deter its diffusion (and this is almost never the case). The role of government is not to run commercial enterprises; it is to spark innovation elsewhere. But by owning some of the value it has created, which over time has the potential for significant growth, funds can be generated for reinvestment into new potential innovations. By adopting a “portfolio” approach to public investments in innovation, success from a few projects can then help cover the losses from other projects. In this way, *both* risks and rewards are socialized (Mazzucato, 2016).

Examples of direct forms of public rewards

There are many examples of public organisations that have strategically considered the distribution of risks and rewards. At times, they have granted licenses to private firms willing to invest in up-grading publicly-owned technologies, offering the opportunity for public and private to share risks and also the rewards. For example, NASA has sometimes captured the returns to its inventions, whilst private partners gained on the value-added in case of successful commercialization (Kempf, 1995). Further there are examples of state-owned venture capital activity generating royalties from public investments (in Israel, see Avnimelech, 2009) or equity (in Finland via Sitra), and the more pervasive use of equity by state development banks (eg in Brazil, China and Germany, see Mazzucato and Penna, 2016).

Policy instruments for tackling risk-reward issues combine supply and demand-side mechanisms, geared to enabling public value creation through symbiotic public-private partnerships (“active”) (Lazonick & Mazzucato, 2013) and blocking value extraction (“defensive”).

The different mechanisms to distribute rewards can be done either directly through profit sharing (via equity, royalties) or indirectly through conditions attached, focussed more on the market shaping role. The latter may involve conditions on reinvestment of profits, conditions on pricing, or conditions on the way that knowledge is governed. We review these below (for a longer discussion see Laplane and Mazzucato, 2018).

a) Pricing capping schemes. On the defensive side, to ensure that taxpayers do not pay twice governments might want to adopt pricing capping regulations instead of relying on market forces to spontaneously produce equitable prices. Indeed, such a possibility exists under section 203 of the Bayh-Dole Act, which established the US government’s “march-in” right over pharmaceuticals if, among other reasons, patent holders that benefited from public funding fail to satisfy “health and safety needs” of consumers (Sampat & Lichtenberg, 2011). Despite numerous discussions from time to time (Davis & Arno, 2001;

Korn & Heinig, 2004), it has not thus far been implemented. Another instrument for ensuring competitive prices is the implementation of competition and antitrust policies, which may be far less tolerant with monopoly prices than it's been, say, over the past 40 years in the U.S. (Stiglitz, 2017).

- b) Conditions on reinvestments.** Another possibility is to negotiate conditions on reinvestment into the real economy, which can be achieved through regulation and/or attached to financing contracts. As a matter of fact, the inception of the Bell Labs resulted from the Department of Justice's implementation of antitrust laws (Brumfiel, 2008). In 1925, among the conditions imposed on AT&T Company to be able to retain the monopoly over the phone system, the US government required the company to reinvest a share of its profits in research. Also, conditions targeting the creation of specific commercial, industrial or technological benefits in the context of defence-related procurement ("offset agreements") is common practice in many countries. Most remarkably in Sweden, where this instrument has been explicitly part of a strategy to promote the military aircraft industry (Eliasson, 2017), but also in the US and Brazil (Vieira & Alvares, 2017) among others.
- c) Knowledge governance.** Several measures can be articulated to advance the creation and diffusion of the key knowledge needed to tackle problems like climate change, poverty, etc. One is to reform the Intellectual Property Rights (IPR) system so as to harmonize it with the broader set of institutional requirements for multiple actors to access and use knowledge (Henry & Stiglitz, 2010). This involves ensuring IPR is flexible enough and patents are good quality, used for productive instead of financialization purposes, narrow in scope and length (Mazzoleni & Nelson, 1998; Frischmann & Lemley, 2007). IPR may also be managed strategically through the exploitation of some of the flexibilities still left under the WTO-TRIPS agreement. For example, governments may choose to issue compulsory licenses or threat to do so in order to obtain access to knowledge and/or price reductions on proprietary goods. In the 2000s, this has been used to promote access to medicines (e.g. in Brazil, India, Indonesia, South Africa, etc.), genetic diagnostic tests (in France), and government's purchases of antibiotics for defence purposes¹²⁷ (in the US) (Reichman, 2009). Where IPR blocks the creation and diffusion of knowledge that is key for competitors (e.g. through refusals to license or defensive patenting behaviour) competition and antitrust policies may help – as applied by European authorities (Motta, 2004). These may be more effective if supplemented by alternative incentives like "open source" and prizes. In particular, featuring as lead-investors offers more opportunities for public organizations to choose whether to hold title over resulting inventions, and negotiate licensing conditions, whilst engendering within-industry and across the economy spillovers, as defence-related R&D spending in the US illustrates (Mowery, 2009).
- d) Tax reforms.** On the one hand, tackling present evasion, avoidance, loopholes, and tax incentives for unproductive entrepreneurship – like the patent box which increases profits without increasing business investments, or reduced tax rates over capital as compared to corporate gains – may enhance the government's revenues and its redistributive capacity (Lazonick & Mazzucato, 2013). On the other one, tax regulation can be designed

¹²⁷ D. McNeil Jr. "A nation challenged: the drug, a rush for Cipro and the global ripples", *The New York Times*, October 17, 2001. Available at: <http://www.nytimes.com/2001/10/17/world/a-nation-challenged-the-drug-a-rush-for-cipro-and-the-global-ripples.html>

to more actively incentivize productive entrepreneurship using measures such as low taxation for hiring labour and high for financial transactions). In addition, in seeking to capture a direct share of the profits resulting from strategic investments, the state may choose to create some form of tax-based mechanism (Enke, 1967). Realistically, however, distributive tensions require governments to be creative and, wherever possible, seek for tax reforms which may more commensurately reflect its role in the economy – not just “fixing” but also “creating” markets.

- e) **Revenues beyond taxation.** On the strategic front, to ensure that both risks and rewards are shared with supported firms, government might use royalties on IPR licensing or sales/exports of supported innovations through “recoupment measures” like income or sales-contingent (repayable) funds (Windus & Schiffel, 1976). This has been the case in the Dutch Technological Development Loan program carried out by the Senter-agency of the Ministry of Economic Affairs, from 1954 to 2001 (Kaivanto & Stoneman, 2007). While these have been most often implemented in support to SMEs, there are also experiences of using this type of schemes to finance projects in large firms, such as in the aircraft industry. This suggests that some innovations around this idea of income-contingent funds could be useful to support transformations of existing locked-in sectors such as energy, industrial agriculture, manufacturing, and transport, where large corporations are key. Another possibility is to retain royalties on equities, through state-owned venture capital funds, like in the case of Yozma in Israel (Erlich, 2002; Avnimelech, 2009; Lerner, 2010). Similar experiences, at different scales, can be found in the Finish Innovation Fund (SITRA) and state-owned banks in Brazil, China and Germany. This instrument also provides the state with greater opportunity to negotiate the ownership structures of firms, which can be seen as strategic to block value extraction. For example, preferred stocks get priority in receiving dividends, granting the government with high dividend rates and warrants; golden shares enable to veto mergers, liquidations, asset sales, and other major corporate events. Both have been widely adopted by the UK government to avoid privatized firms being fully controlled by foreigners or successfully targeted for hostile takeover (Jones, Megginson, Nash, & Netter, 1999). In any of the above forms, firms’ payment of royalties is conditioned and proportional to their success.

This list is not meant to be exhaustive, but rather, to illustrate that there are multiple experiences in handling policy instruments that, implicit or explicitly, permit to take account of issues like value extraction and enabling government to capture a share of the value it helped to generate. The latter, in particular, have been adopted by different types of agencies, at different stages of the innovation chain but mainly downstream, involving different types of partners (e.g. firm size) and industries. However, not always have they been adjusted to the specificities of different economic, industrial and legal settings. Absent a framework that more clearly informs these policies, decisions on these matters have sometimes been made unintentionally and haphazardly, inviting both government and systemic failures.

The prospect of the state owning a stake in a private corporation may be anathema to many parts of the capitalist world, but given that governments are already investing in the private sector, they may as well earn a return on those investments (something even fiscal conservatives might find attractive). The state need not hold a controlling stake, but it could hold equity in the form of preferred stocks that get priority in receiving dividends. The returns could be used to fund future innovation (Rodrik, 2015). Politicians and the media have been too quick to criticize public investments when things go wrong, and too slow to reward them when things go right.

Thus, rather than worrying so much about the “picking winners” problem, more thinking is needed about how to reward the winning investments so they can both cover some of the eventual losses (which are inevitable in the innovation game), and also raise funds for future investments. This can be done by, first, getting the tax system to work, and, second, considering other mechanisms which allow the state to reap a direct reward in those cases when it is making specific bets on companies. If all fails, the taxpayer picks up the bill. But when it goes well, the taxpayer gets rewarded.

Going hand in hand with this consideration is the need to rethink how public investments are accounted for in the national income accounting. Investments in innovation are different to current expenditures. The latter does not add to balance-sheet assets; the former does, and is potentially productive investment in the sense that it creates new value (Mazzucato and Shipman, 2014). When setting limits to fiscal deficits, it is therefore necessary to distinguish public debt contracted for investment in R&D and infrastructure (value-creating investments) from public debt contracted for (public or private) consumption. In this sense, financial and accounting reforms should be regarded as a prerequisite for any successful smart and inclusive growth plan.

Finally, considering the role of government as lead risk-taker helps to debunk fundamental assumptions behind the *theory of shareholder value*, which underpins the exorbitant rewards earned by senior executives in recent years. Pay via stock options has been a key feature of modern capitalism, and especially a key driver of the inequality between the top 1 percent of income earners and the rest (Piketty, 2014). Stock options are boosted when stock prices rise, and prices often rise through “financialized” practices such as share repurchase schemes by companies (Lazonick, 2014). Focusing on boosting share prices is justified on the grounds of the theory of *shareholder value*, which holds that shareholders are the biggest risk-takers in a company because they have no *guaranteed* rate of return (while workers earn set salaries, banks earn set interest rates, etc.). That is, they are the *residual claimants* (Jensen, 1986). But this assumes that other agents do have a guaranteed rate of return. As we have argued throughout the paper, precisely because what the state does is not just facilitate and de-risk the private sector, but also take major risks, there is no guarantee of success in its investments, which have historically also played a crucial role in enabling wealth creation. The fact that a key driver of inequality has been linked with a problematic understanding of which actors are the greatest risk-takers implies that combatting short-termism (Haldane, 2016) and speculative forms of corporate governance (Kay, 2012) requires not only reforming finance and corporate governance, but also rethinking the models of wealth creation upon which they are based (Lazonick and Mazzucato, 2012).

6. From public goods to public value

Thinking about the returns to public investment forces us to rethink the terminology with which we describe government. Portraying government as a more active value creator – investing, not just spending, and entitled to earn a rate of return – can eventually modify how it is regarded and how it behaves. All too often governments see themselves only as “facilitators” of a market system, as opposed to co-creators of wealth and markets. And, ironically, this produces exactly the type of government that the critics like to bash: weak and apparently “business-friendly”, but open to capture and corruption, privatizing parts of the economy that should be creating public and collective goods. This dismal outcome is unnecessary, however.

Government's role in creating value needs to be better reflected, not only in GDP but also more generally in the concept of "public value". While this term has been used in the literature on public administration, too often it has resulted in putting pressure on government to get "value for money" rather than allowing democratic processes to engage in an open debate on what sort of society we should be striving for, and the role of public spending, investment and regulation in achieving it (Mazzucato, 2018a).

A new discourse on value, then, should not simply reverse the preference for the private sector over the public. What is required is a new and deeper understanding of public value, an expression found in philosophy but almost lost in today's economics. This value is not created exclusively inside or outside a private-sector market, but rather by a whole society; it is also a goal which can be used to shape markets. Once the notion of public value is understood and accepted, reappraisals are urgently required – of the idea of public and private and of the nature of value itself. "Public values are those providing normative consensus about (1) the rights, benefits, and prerogatives to which citizens should (and should not) be entitled; (2) the obligations of citizens to society, the state, and one another; (3) and the principles on which governments and policies should be based" (Bozeman, 2013, p. 13).

The idea of public value is broader than the currently more popular term "public good". The latter phrase tends to be used in a negative way, to limit the conception of what governments are allowed to do, rather than to stimulate the imagination to find the best ways to confront the challenges of the future. So the state-owned BBC is thought to serve the public good when it makes documentaries about giraffes in Africa, but is questioned if it makes soap operas or talk shows. State agencies can often fund basic science due to the "positive externalities", but not downstream applications. Public banks can provide counter-cyclical lending, but they cannot direct their lending to socially valuable areas like the green economy. These arbitrary distinctions reflect a narrow view of the economy which often results in a public actor being accused of "crowding out" a private one – or, worse still, delving into the dangerous waters of "picking winners": the state is only supposed to do what the private sector does not want to do, rather than have its own vision of a desirable and achievable future (Mazzucato, 2018a).

Public institutions can reclaim their rightful role as servants of the common good. They must think big and play a full part in the great transformations to come: squaring up to the issues of climate change, ageing populations and the need for twenty-first-century infrastructure and innovation. They must get over the self-fulfilling fear of failure, and realize that experimentation and trial and error (and error and error) are part of the learning process. With confidence and responsibility, they can expect success, and in so doing will recruit and retain top-quality employees. They can change the discourse. Instead of de-risking projects, there will be risk-sharing – and reward-sharing.

It might also make sense for private enterprises – which benefit from different types of public investments and subsidies – in return to engage in a fair share of activities which are not immediately profitable. There is much to be learned from the history of Bell Labs, which was born out of the US government's demand that the monopolist AT&T invest its profits rather than hoard cash, as is so common today. Bell Labs invested in areas that its managers and its government contractors thought could create the greatest possible public value. Its remit went well beyond any narrow definition of telecommunications. The partnership of purely government-funded research and work co-financed by Bell Labs and agencies like DARPA led to phenomenal tangible results – many found in our handbags and pockets today.

A bold view of the role of public policy also requires a change in the metrics used for evaluation of those policies. Today's typical static cost-benefit analysis is inadequate for decisions which will inevitably have many indirect consequences. A much more dynamic analysis, one which can capture more of the market-shaping process, is urgently required. For example, any measure of the success of a government project to organize a charging infrastructure for electric cars must try to take into account the opportunities offered for further technical development, the reduction of pollution and the political and the ecological gains of lessening reliance on non-renewable oil from countries with objectionable governments.

It is crucial to find metrics which favour long-run investments and innovation. In the 1980s, it was not cost-benefit analysis that led the BBC to establish a dynamic "learning programme" to get kids to code. The activity led to the development of the BBC Microcomputer, which found its way into all British classrooms. While the Micro did not itself become a commercial success, procurement for its parts supported Acorn Computers and eventually led to the creation of ARM Holdings, one of the most successful UK technology companies of recent decades. Similarly, there would almost certainly be more European high-tech successes if there existed greater interaction between innovation systems and public procurement policies. However, to recognize that the public sector creates value we must find ways to assess that value, including the spillovers from this sort of ambitious public funding. The BBC initiative helped kids learn to code and increased their interest in socially and economically beneficial new technologies. It also had direct and indirect effects in different sectors, helping new companies to scale up and bringing new investors into the UK tech landscape.

Making public value better justified, appreciated and evaluated would potentially open up a new vocabulary for politicians. Rather than being mere "regulators" of health care, as co-creators of that care policymakers would have a more justifiable right to make sure that the benefits are accessible to all. A different vocabulary would reduce the timidity which has kept politicians from funding much-needed infrastructure investments for decades, and which led to a bare-minimum fiscal and legislative response to the 2008 financial crisis and subsequent recession. Once the potential of the executive and legislative branches to promote the good of society is fully recognized, then elected officials can start to live up to higher, but still realistic, expectations. Who knows, young, ambitious people might start choosing electoral politics over careers in the City or business – if they see that such choices are valuable and valued.

7. Conclusion

Thus the state as not only a market-fixer, but also – and especially – a market-maker and -shaper, provides a different justification for its contribution to economic growth. Underscoring and understanding the co-creation of value leads to a different way to consider the division of rewards between public and private actors – away from one that is about policy either only facilitating private value creation or redistributing it, towards one that is about co-creating and shaping it, and aligning the distribution of rewards in such a way that reflect that collective value creation (as well as welfare based redistribution). In other words, given the state's role as risk-taker, and investor of first resort, new thinking is required for the ability of public institutions to not only share in the risks, but also the rewards. This can encourage new thinking on how to achieve growth that is not only "smart" (innovation-led) but also more inclusive – and also make being a civil servant exciting again.

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