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A People's Endowment

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The people's endowment

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This is an early version of a chapter that will be published in a book in 2015. I post it here for discussion and feedback. Please wait until the published version to come out before citing it in an academic work.

The proposal

Governments should establish a people's endowment of common assets and move toward financing activities—such as government spending and a dividend for all citizens—via the endowment rather than solely via taxation. The establishment of a people's endowment will help reorient our thinking about how the government serves the people's interest, and provide both financial and environmental benefits for current and future generations. There are two steps toward establishing an endowment.

The first step is to start doing what a few governments have already done to move in this direction. In recent decades, some national and regional governments have established financial endowments, called “sovereign wealth funds” (SWFs). An SWF is a pool of financial assets held by the government in the name of the people. Usually, SWFs are set up by resource-exporting polities in hopes of turning a temporary resource windfall into a permanent income stream. Such a government deposits some of its resource revenue into an SWF, which becomes a financial endowment producing returns every year in perpetuity. One SWF, the Alaska Permanent Fund (APF) pays a regular dividend, called the Permanent Fund Dividend (PFD), to citizen-residents of Alaska. While the fund ensures that the temporary windfall becomes permanent, the dividend ensures that every Alaskan, now and in the future, benefits from the state's windfall.¹ The potential for creating similar arrangements is enormous. Right now, few of the world's extractive industries pay governments the market value of the resources they extract. Governments devote little of their resource revenue to SWFs. And only one of those SWFs pays a dividend.

The second step is to realize that *financial* assets are not all there is to an endowment. *Physical* assets—our resources and our environment—are the most significant part of the people's endowment. Physical assets are the source of funds for all the world's SWFs. Government's very attempt to take profit from oil and gas industries is a step toward treating these assets as an endowment, but it is only a small step, and they only hint at the mindset that goes along with a people's endowment. Common assets (include the atmosphere, the water system, mineral rights, etc.) belong to both current and future generations. Resources should either remain in common for the direct benefit of the people, or they should be privatized for the profit of people. Government—or whatever institution the people give authority over their endowment—needs to act as custodian, caretaker, of all the people's interest in that endowment. The goal of the custodian of an endowment is *not* to maximize the revenue from the endowment, but to *maximize the total value* of the endowment balancing financial and nonfinancial concerns. The profit earned by sale or leasing

assets has to be sufficient to justify the loss of those assets to the common pool. Very often the tradeoff isn't worth it. Yet, I know of no government that even makes a pretense of doing any such accounting today.

Once we begin to look for it opportunities, it becomes clear that the reserves of oil, gas, and precious minerals that fund most of the world's SWFs are only a small part of the assets under government control. The broadcast spectrum, the central bank and its dependent banking sector, the atmosphere, the surface water system, and so on are just as much common assets as oil and gas reserves. When you think about how many common assets are available for a people's endowment, it becomes obvious what a poor job most governments do of being a custodian of those resources. Currently, most common assets are managed for the benefit of neither current nor future generations. For the most part, the profits privatized common assets go almost entirely to wealthy private individuals and corporations.² Putting these assets into an endowment will increase both the revenue governments earn from private use of common assets and our ability to protect those assets.

Once we have an endowment, I propose we devote half of its yearly returns to regular government spending and the other half of it to a dividend for all the people—in recognition of their shared ownership of their common resources.³ A dividend is important not simply to relieve the effects of poverty, inequality, and economic uncertainty. A dividend is important to ensure that every single person in whose name the endowment is held actually benefits from that endowment.

The rest of this essay will examine how a people's endowment might work and why it would lead to better environmental, social, and economic policy with a longer-term outlook.

Reasons for and possibilities of a people's endowment

Under the endowment model, anyone who seeks to privatize otherwise common resources needs to pay a price upfront sufficient to make that privatization worthwhile for those who lose access to the common resource and do not gain private ownership of it. This is not the usual model of socialism, in which governments control and manage industries. A government with an endowment merely manages the terms on which it leases resources to private individuals and businesses. It is up to those private agents interacting in a market to decide how to use those resources. The endowment model is consistent with a large or a small government sector, and it could be used alongside conventional taxation.

The endowment model is very far from the conventional way governments treat resources, but it is typical of the way most or all private agents treat the resources they control. Two comparisons will help illustrate how inadequately governments manage the people's resources.

Imagine a successful farmer who wants her farm to benefit her children and their descendants. Consider four options. (1) She could bequeath the farm to them, individually or jointly. (2) She could sell the farm and put the money into a trust that will pay dividends to them. (3) She could rent out the farm splitting the rent among her descendants. (4) She could create some kind of land trust so that the farm will always be available as a family park. All of these options treat the farm as her family's endowment.

Now consider an option no private landholder would take seriously: The farmer could simply give away the farm to a corporation on the hope that it will

employ some of her descendants and that subsequent economic activity would end up benefiting all of them. Although no farmer who actually thought of his resources as her family's endowment would do such a thing with the resources under control, this is exactly what governments do over and over again with common assets they control in their peoples' names. Giving away resources, governments not only create inequality of wealth and income; they also cede unequal control of those resources and the revenue they generate. They thereby create entrenched interests that become powerful in the public decision-making process for generations to come.

Consider how so many non-government institutions—such as museums, universities, NGOs, and wealthy families—have endowments made up of both financial assets they use to generate income and physical assets used to further the institution's mission directly (such as items on display at a museum, the buildings on a university campus, or a family home).⁴ In many cases, universities' financial portfolios grow as their campuses get larger and more elaborate. Harvard's financial endowment is over \$32 billion, having risen from \$17 billion in 2001.⁵ Its managers claim to have delivered an average annual return of more than 12% per year over the last 20 years.⁶ In addition, Harvard real estate holdings have increased greatly in recent years, now including thousands of acres of land and hundreds buildings.⁷ If a small institution like Harvard can accumulate growing investments over time, why can't a large institution, like the United State government, do the same?

If Thomas Piketty's recent findings are correct, we should expect many capital-holding institutions to grow over time. He presents a great deal of historical evidence that the returns to capital have tended to exceed the economic growth rate for most of the last two centuries.⁸ If so, any capital-holding institution (whether a family, a business, or a non-profit enterprise) can grow its endowment over time as Harvard has, as long as it spends less than its returns each year.

In light of these examples, it seems strange that governments don't already have large and growing endowments. They control more assets than any private institution, yet the assets they control don't follow the typical pattern: the commons tends to shrink in size and value every year to privatization and pollution. Governments seldom build up financial (or any other) assets in return for all that it has given to private industry. While Harvard started with a few books and a few buildings, the United States has at one time or another claimed direct control over most of its nearly 3.7 million square miles of land area—a territory that contains enormously valuable land and resources. The ownership of most of that land has passed into private hands, but the U.S. government has built up no financial endowment in exchange for all of that privatization.⁹ Governments have acted neither as good custodians of the environment nor as profit maximizing sellers of resources.

It doesn't have to be that way. It's not too late for the government to establish an endowment from the resources we all still share. Doing so, it will change some of the way we look at the role of citizens in a democracy. People tend to think of taxes as a mandatory fee for service. The government provides services such as education, welfare police, military protection, and so on, and the people pay taxes in exchange. Thus, their claim to deserve something from the government comes from their being a "taxpayer." This view has a number of problems, not least the antidemocratic implication that the more you pay the more services you deserve and the greater role you should have in decision making.

To the extent an endowment is in place, individuals pay the government for access to the people's resources. They act as customers of the government, not for the purchase of services but for the right to hold property that would otherwise belong to

everyone. Citizens are entitled to receive services and/or direct payments from the government because they are co-owners of the resources they put under the government's care.

SWFs: a positive step but a limited example

SWFs—especially Alaska's dividend-paying APF—provide an example of how governments can use endowments to benefit people, but they represent only a limited application of the wider endowment strategy, and their example might give people the impression that the possibilities of a resource endowment are more limited than they really are. This section discusses what we can learn from the SWF example. Later sections discuss how and why it should be widened.

Alaska created the APF in 1974 when it began exporting oil from the North Slope. It began paying out the PFD in 1982. Over the last 10 years (2004-2013), the dividend has averaged about \$1,213 per year for every individual or about \$4,853 for a family of four. Despite paying nearly \$20 billion in dividends over more than 30 years, the APF is now worth more than \$50 billion.¹⁰ So far, the APF and PFD have been instrumental in helping Alaska avoid the resource curse, in which the people of many resource-exporting nations fail to benefit from their resource exports or in which those benefits prove temporary. If nothing else, all Alaskans have benefited in one direct way from Alaska's oil. Very few resource-exporting regions can make that claim. Mexico and Nigeria, for example, have exported a lot of oil, but it is hard to say how or whether the poorest Mexicans and Nigerians have benefited.¹¹

The APF and PFD also ensure the future generations will continue to benefit from Alaska's temporary oil windfall. The fund and its dividend are financially sound. The state might choose to get rid of them someday, but as long as they are allowed to exist, we can expect them to produce dividends for all future generations. Modern Pennsylvanians probably can't say how or whether they've benefited from the Pennsylvania oil rush of the 1860s,¹² but future Alaskans will have one small tangible program to point to,

The APF is small compared to other SWFs, the largest of which are well over half a trillion U.S. dollars. The United Arab Emirates has one worth \$627 billion; Saudi Arabia's is worth \$676 billion.¹³ Norway's SWF, which has recently reached \$818 billion or about \$161,000 for each person, is primarily used to support the country's government pension system.¹⁴ Therefore, Norwegian pensions will be financed by the assets their government owns around the world for generations after their oil-exports have run out. The fund is now larger than the country's national debt (\$759 billion), so that by some counts, Norway has no national debt. It has a national *surplus*.¹⁵

These SWFs are examples of governments establishing endowments that work like the private endowments I discussed above. They can both finance government spending and grow over time, and if they are managed well they will continue to provide benefits for future generations. Not all SWFs are people's endowments because they are held by authoritarian governments.¹⁶ But they demonstrate the possibility that public agents can build up endowments like the farmer and the universities in the earlier examples.

The success of these SWFs ought to inspire imitation. If it is a good idea for Alaskans and Norwegians to be paid for their share of their country's oil, it must also be a good thing for Namibians to be paid for their share in the country's diamonds, for Jamaicans to be paid for their country's beaches, for South Africans to be paid for the

country's gold, for the Swiss to be paid for their banking system, and so on around the world.

For these reasons, we can learn a lot from nations that have set up SWFs. However, because the SWF is a relatively new idea that has been tried only in limited circumstances, I'm worried that they will give people the impression that the endowment model is far more limited than it is. The rest of this chapter will dispel the following potential misconceptions demonstrate how much potential the endowment model has:

1. People might think that the financial fund is the endowment. Actually, it is our common resources that are the endowment. The establishment of a financial fund is only one of many things we can do with it.
2. People might think that resource endowments are inherently small or that this strategy is something only a few nations can do, only in unusual circumstances, and only for a limited time. Actually, the all nations have many extremely valuable common resources, most of them renewable.
3. People might think that getting revenue from resources naturally accompanies the irresponsible depletion of resources or degradation of the environment. Actually, a resource endowment requires that resources be managed responsibly, for the benefit of future generations, and it provides a coherent mechanism for doing so.

As the following sections explain the benefits of the endowment model, they will also address these misconceptions.

It's not the fund it's the resources

SWFs are financial endowments, but polities' nonfinancial endowments—their physical resources—are far more important. The act of creating an SWF is not the *establishment* of an endowment; it is the *transformation* of a physical endowment into a financial endowment. The most important thing to learn from the actions of some resource-exporting polities is not that they have set up SWFs, but that they have stopped giving away resources and started selling them. This perspective reveals the greater potential of the endowment model and how far short of it most nations currently fall.

Even the largest SWFs in the world represent a small and narrow model of the potential for a people's endowment, because they are made up entirely of financial assets, and they are usually based entirely on revenue from one or two resources, which are generally not treated as part of a national endowment. The potential for all governments to build up SWFs is enormous and the potential for them to build up a common asset endowment beyond the financial SWF is even greater.

On average, from 1977 to 2010, 87 percent of the State of Alaska's government revenue has come from oil taxes, fees, and royalties.¹⁷ Several resource-exporting polities (such as Norway, Qatar, the UAE, Kuwait, and Saudi Arabia) are also financing all or most their government spending from resource-revenue.¹⁸ They are, in one important sense, applying the endowment model. Most citizens pay almost no taxes, less defined by their role as taxpayers and more as owners of shared resources. Companies who exploit some of the state's resources pay taxes as a fee for access.

Unfortunately, most nations, including these, tend to fall short of what is needed to treat resources as an endowment in several respects. They do not always apply the model to all resources they privatize. They do not always charge sufficiently high prices for the resources they do privatize. They do not always save enough of the revenue from nonrenewable resources. And they do not always take sufficient account of the rate at which they are depleting nonrenewable resources or of the environmental impact on future generations of doing so.

The experience in Alaska provides an example of some of these shortcomings. As mentioned above, the PFD has averaged about \$1,213 per person per year and that it can be expected to continue to give dividends forever—or as long as the legislature allows the program to continue. Barring a significant change in policy, great luck, or another resource windfall, the size of the dividend is not likely to rise significantly. This legacy is small.

The APF and PFD are small partly because Alaska receives a relatively small portion of the revenue from its oil exports. The state has received about one-third of the revenue generated by its oil exports. The other two-thirds have gone to private for-profit oil companies. Norway has driven a much harder bargain, receiving 78 percent of oil revenue, and still finding plenty of oil companies willing to do the drilling.¹⁹ Conditions are different in Norway than in Alaska, but it is reasonable to say that Alaska could have raised roughly twice as much revenue as it has if it drove a similarly hard bargain.

The other reason that the dividend will have a relatively small impact on future generations is that Alaska devotes only a small portion of its oil revenue to the fund. As of 2010, only 18.3% of the state's oil revenue had been devoted to the APF.²⁰ One plan that was discussed in Alaska at the outset of the oil boom was to put *all* of the state's oil revenue into an SWF and spend only the interest, gradually reducing other taxes as revenue from the fund made them unnecessary.²¹ Had it done so and had it charged rates similar to Norway to drilling companies, we can imagine—all else equal—the fund and dividend would now be 10 times their current levels. That would make the APF more than \$500 billion and the PFD \$12,000 per person per year (\$48,000 for a family of four).²² Or, if the state devoted half of the APF's returns to the dividend and the rest to government spending, the dividend would be about \$6,000 (\$24,000 for a family of four) and the state would have \$20 billion to spend each year. The State of Alaska spent only a little more than \$12 billion in 2013,²³ and so they could devote more to the dividend or to other worthwhile spending such as education and infrastructure. Of course, all else would *not* have remained equal, but it is fair to say that Alaska's fund and dividend could be several times larger than they are now.

In hindsight, devoting all resource revenue to the fund would have been far better for current and future Alaskans than what the state government ended up doing: it gave itself an enormous tax cut at the expense of future generations by eliminating the income tax in 1980. Lower taxes, of course, are a benefit to for the people, but as then governor, Jay Hammond argues, the benefit of eliminating the income tax was felt primarily by the wealthiest Alaskans and little if at all by the poorest.²⁴ Alaska could and should have devoted far more funds to the APF than it did, and as I have argued elsewhere, it is not too late for Alaska to start devoting more revenue to the APF in preparation for the eventual loss of oil revenue.²⁵ However, it might not have been best for Alaska to devote all of its oil revenue to the APF. Alaska badly needed improvements to its educational system and its infrastructure at the time. These too are part of the endowment we leave for future generations, and they can be a more

important than any financial legacy we leave future generations.²⁶ Whether Alaska could have financed the necessary infrastructure spending off of other taxes while it saved its resource revenue is an academic question, but the importance of this tradeoff is something all communities with future resource windfalls will have to deal with.

The lack of savings in Alaska and most other resource-exporting nations is not the result of large and forward-looking infrastructure spending. In effect, by eliminating the income tax, the current generation of Alaskans is spending a temporary revenue stream on themselves, depleting a resource forever but leaving a fiscal cliff for future generations when the oil begins to run low. Similarly, living in the Persian Gulf, I get the impression that most hydrocarbon exporting nations will leave neither sufficient physical infrastructure nor sufficient financial savings to sustain their current level of development when the resource exports run low. These decisions represent a serious failure of the current generation's leadership to be a good custodian of the people's common inheritance.

The need to save revenue and make appropriate investments is important for any community receiving a temporary resource revenue stream. The strategy is simple, but it takes discipline and planning. The community needs to consider how long the resource windfall is likely to last, what kind of capital and technological infrastructure will be useful when the resource is gone, and what potential exists for financial savings. The history of the resource curse demonstrates both the difficulty of gathering the discipline to turn a temporary resource windfall into a permanent endowment and the importance of doing so.²⁷

Finance and future generations

The conclusions of last section invite two nearly opposite responses: Can any amount of financial wealth compensate future generations for the depletion of resources and damage we do to the environment now? And how and why we should we financially compensate future generations when a technologically superior future economy will probably deliver far higher living standards to them? The final section addresses the first question. I'll address the second one here.

One might argue that future generations will be so much wealthier than we are that we have no reason to compensate them, and that we are incapable of doing so anyway, because everything capable of benefitting people living in the future will have to come from the resources available at the time they live. Saved money is not a resource. It is only a claim on resources. Given this obvious fact, assuming the trend in rising incomes continues, how can and why should the current generation compensate future generations, *financially*?

The key to answering both the how and the why is that any generalizations we make about future generations applies only to the average, not to everyone. A world with a highly skewed distribution of wealth is nearly the opposite of Lake Woebegone: most of the children are below average. Privatization—as it is usually practiced—assigns *permanent* ownership of resources to some people and not others. The beneficiaries of privatization can and will pass on the benefits of those resources to future generations in the form of wealth. If Piketty's trend continues, the wealth we privatize today will accumulate returns at a higher rate than the economy grows, ensuring—before future generations are born—that some will be born to have and some to have not. The function of a permanent financial endowment is to compensate those who would otherwise be born with fewer claims on resources for setting that trend in motion, giving all the members of future generations some of the benefit of

the wealth accumulation our economy will do between now and then and at least partially counteracting the negative effects of that trend. Conventional privatization asks people of future generations to concede access to resources to a small group that the current generation has designated owners of those resources. The current generation does so for its own financial gain. Therefore, the current generation owes all the people of future generations a share of that financial gain.

Future generations could rectify economic inequality using the government's power to tax and redistribute property that exists in their generation, but it is wrong of us to put them in the position where they have to do so, when it is entirely possible for us to expand our productive capacity without creating the problem of excessively unequal resource ownership for future generations to solve. Problems are usually more easily prevented than solved, as long as you see them coming. Now that we are coming to understanding the problems we create by allowing privatized resources to be accumulated as capital generation after generation,²⁸ we can begin to take action to prevent them.

This problem is more easily prevented than solved partly because once a given group has been granted a strong legal rights over specific resources, they gain both the motivation to protect that privilege and political power with which to do so. The income tax, the inheritance tax, and the capital gains tax all have political enemies. The APF has no enemies. It's just a pool of publicly owned funds. No one feels inhibited by its existence, even though it is an equalizing mechanism just as much a redistributive income tax. If it did not exist, some wealthy people would own those assets instead, and the world would be a little more unequal, but the people in that group don't know who they are and can't easily act as a political constituency to attack the APF.

Something all nations can do

I have so far argued that some resource-rich nations have made a small start but could do much more to behave as the custodian's of their people's resource endowment. I now want to show how we can apply this model nations not usually recognized as resource-rich. The difference between what we usually think of as a resource-rich nation and what we think of as a resource-poor nation is that resource-rich nations are rich in the kinds of resources governments usually sell and resource-poor nations are rich in the kinds of resources governments usually give away. All nations have enormously valuable resources, most of which are being privatized without any compensation to the people for removing them from the commons. For example, foreign tourism in beach-destination countries is—financially speaking—just as much the export of a resource as the oil industry. Yet, to the best of my knowledge, there are no beach-based SWFs; there are no beach dividends; instead there often corporate subsidies for development. Bottled water is just as much a resources, but many companies take it out of the ground (or out of the tap) at no charge.²⁹

Common assets include the atmosphere, land (both public and private), mineral extraction (all mining and drilling industries), land value, wind, fisheries, the broadcast spectrum, the internet, and the financial and monetary system.³⁰ Most of these are renewable assets that can generate revenue every year without becoming depleted. Therefore, the revenue can be spent as it comes in and need not be deposited into an SWF to maintain returns in the future.

A completely renewable resource, the broadcast spectrum, provides a very good example of the potential of treating common assets as the people's endowment. The broadcast spectrum is used by radio, television, cell phones, wireless internet, and so on. When you pay for these things, you pay partly for the company's provision of service, but you also pay for the slice of the broadcast spectrum they own. Their slice has value because the spectrum is a scarce resource. There is only so available; the company owns it; and you don't. Of course, the company didn't create the broadcast spectrum. It didn't invent it. It didn't discover it. The company owns the broadcast spectrum because they hold a government lease granting them control over it.

Although most governments legally assert ownership of their country's broadcast spectrum,³¹ in most cases, governments charge little or nothing for leases to it, granting them to people who are already wealthy and powerful for a token concession.³² The U.S. government, for example, gave away television-broadcasting rights largely in exchange for broadcasters' promise to run occasional public service announcements.³³ A 2003 study evaluated U.S. broadcast spectrum at \$301 billion per year,³⁴ enough to provide a dividend of \$1000 for every man, woman, and child in the United States every year from now on.

By leasing the broadcast spectrum on these terms, the government has created private property (literally out of thin air), giving away a revenue source worth approximately one-seventh of government expenditure in the year of the study. The holders of broadcasting licenses are likely to reinvest much of their returns into revenue-generating capital, and so the \$300 billion of income in any given year is likely to create additional inequalities every year into the future. Private owners are building endowments out of the assets they control, because the government does not.

Many other common assets are treated like the broadcast spectrum. The government created the internet; the community makes it valuable; but private companies capture the rewards. The government lends money to banks at very low interest rates and they lend it out to the rest of us at higher rates. The U.S. government spends enormous sums to bail out banks and other institutions during financial crises, but does not usually leverage those moves into permanent ownership of anything.³⁵

How big is the potential for revenue from common assets? Gary Flomenhoft estimates the value of common assets in the "resource-poor" state of Vermont, including the following assets: air, wildlife and fish, public forests, groundwater, surface water, minerals, land value, wind, the broadcast spectrum, the internet, the financial system, and the monetary system. He finds the total rental value of these assets to be somewhere between 8.86 and 28.31 percent of Vermont's GDP. The range is wide because this strategy requires creating auction markets where none exist now. It is difficult to estimate what the prices in those auctions will be.³⁶

If Flomenhoft's low estimate is representative of the United States as a whole, common assets produced \$1.28 trillion of revenue per year. If the higher figure is representative, the amount of rent available is 28.31 percent of the \$14.5-trillion GDP of the United States, or about \$4.10 trillion. If half of that (\$2.05 trillion) were used for government spending, it could fund 82 percent of the US government budget. The other half could fund a dividend of \$13,300 per person per year, or \$54,200 for a family of four.³⁷

According to Mark Blyth and Eric Lonergan, the Bank of England, the European Central Bank, and the Federal Reserve already own assets in excess of 20 percent of their countries' GDPs.³⁸ That alone would make a good start: something in the neighborhood of \$300 billion in that United States.

In one sense, it doesn't necessarily matter how much money there is in treating assets as the people's endowment. Whether we can raise a little or a lot, we owe it to ourselves and to future generations to start thinking about our resources as our endowment, rather than squandering it for the benefit of businesses, and receiving nothing for it. We need to change our thinking. We need to stop accepting governments giving away common assets for nothing. We need to stop thinking that businesses need or deserve free resources just to induce them to provide services using those resources. If they think they can make money with otherwise common resources, they should pay the full market value for those resources.

The most important issue isn't finance

The financial benefits of treating common assets as the people's endowment are not the only benefits or necessarily the most important benefits of establishing a people's endowment. The most important thing we, the people, do by establishing the endowment is to assert *ownership* over our environment as a system. Currently, no one owns the environment. People own bits and pieces, but no one manages or takes responsibility for the system. Governments regulate some uses of the environment here and there but not as part of a systemic plan to restore and maintain a healthy environment.

To see the natural resource base as the people's endowment is to see the natural resource base as our treasure. It has to be managed for the long-term benefit of the people—in every sense in which it benefits the people. Any proposal to exploit resources has to be considered against the overriding goal of maintaining a health environment.

It's unreasonable to think that no natural resources should ever be converted into consumption or investment goods. To take such a proposition literally would mean that humans could not construct homes, build fires to heat them, or bring food home to eat in them. Some amount of consumption has to be able to justify some amount of alteration of human environment. The environmental problem is not that we have made environmental tradeoffs, and the solution is not to reject all environmental tradeoffs. The environmental problem is that we have ignored tradeoffs as if we can convert any resource into consumption or investment at no environmental cost. For centuries any land that was not economically exploited was called "wasteland."³⁹

Even today environmental regulations tend not to be based on a careful accounting of the costs involved. Some actions (such as chlorofluorocarbon emissions) are limited or prohibited; other actions (such as most green house gas emissions) are allowed freely or freely up to the limit,⁴⁰ as if anything not prohibited imposes no costs on others. Some things must be prohibited, but there is no environmental free lunch: the conversion of natural resources into consumption and investment always involves an environmental tradeoff that will affect all future generations. Environmental accounting—the effort to make these tradeoffs explicit—is still in its infancy, and little, if any, public policy around the world incorporates realistic accounting of environmental tradeoffs,⁴¹ and then, as I've argued above, the *purchase price* for the permission to exploit any resource has to justify that tradeoff. A good custodian of the people's property doesn't give it away for free and doesn't sell it below cost. A simple application of Adam Smith's invisible hand theory⁴² implies that users of resources will overexploit them unless they pay the environmental costs of their use. Charging for something discourages its use.

Charging for resources is a powerful tool to protect the environment. Even though this tool has a very important side benefit of raising enormous amounts of revenue, it's rarely used today.

There are difficult political economy issues in determining environmental costs to current and future generations. But, right now, governments are not doing it at all. Any effort to value our resource endowment is a step forward. It will be a great deal of effort to do it well. One advantage is that once we tie government revenue to the value of the resource endowment, we give government an incentive to put a high value on the resource base.

One might think that if we start charging businesses for resources, we will start privatizing even more of our environment to make more money. I want to argue that the opposite is true. People have been depleting our resource base for thousands of years without paying dividends. Throughout history, resources have typically been up for grabs in a free-for-all or given away by governments to crony capitalists. In either case, people have incentive to exploit resources to extinction. There are thousands of examples going back to prehistory.⁴³ No one got a dividend for the hunting of the moa or the dodo. Under crony capitalism, neither government nor business accountable for the effects of their actions on future generations as they would be they were under the scrutiny of a public wanting to get the most out of its resources. The assertion of ownership of our common resources will provide the mechanism to manage and maintain our environment and make users of resources accountable.

It is possible that people of the current generation could be shortsighted and manage resources in a way that is detrimental to future generations, but I have argued that charging for use discourages use. It seems dangerous to reject that tool for fear that receiving money would make policymakers any more willing to privatize resources than they already are. I will give three reasons that the people have much less reason to do so that people will be significantly less shortsighted under the endowment model than under more conventional practices.⁴⁴

1. The community needs to think like an owner. The right to demand payment for the use of an asset is the assertion of ownership over it, and with ownership confers not only the right to receive income from an asset but also the rights to control and manage that asset.⁴⁵ If corporations own the resources, the people are the hired help. Once the people think of themselves as owners, businesses work for communities rather than the other way around. When private companies own the environment, any government action to protect it is "interference" with the powers that naturally flow from ownership. Once we establish the people as owners of the environment, government as custodian, and private companies as the hired help, environmental protections naturally follow from the people's ownership. Environmental regulation of privately owned resources is the attempt to make up for conceding powers that never should have been conceded to begin with.

Ownership (and the management power that goes with it) is the solution to the tragedy of the commons, which is somewhat of a misnomer. "The tragedy of the commons" refers to the problem of unmanaged non-ownership rather than managed common ownership. The name comes from theorized pastoralists who have an incentive to over-graze a common field that none of them owns.⁴⁶ One solution is to divide the field into private property, but another solution is to formalize collective ownership of the common field, establishing an authority with the power to set rules individual access to the common field.⁴⁷

The tragedy of the unmanaged commons drives much of our environmental problems today. Firms do not usually waste the resources they own; they find ways to waste the resources that remain unowned or that are owned by others with less power. Agribusiness firms do not overgraze their own fields or to butcher their own herds to extinction as passing sailors butchered the dodo,⁴⁸ but they do have incentive to overwhelm the watershed with excessive cattle excrement, hormones, fertilizer, and other pollutants.⁴⁹ They do so because the community has never truly asserted ownership of the watershed. They have never appointed any authority to say this is people's watershed; you harm the people if you damage it; here is what you can and can't do with it; and this is the price of what you can do.

2. The community needs to think like a monopolist. An interesting thing happens when a community stops giving away resources for nothing: it can sell less and get much more revenue. That's possible because the community becomes a monopolist with corresponding price-setting power. This statement is less true of a resource like oil, which is sold a world market. But even the poorest countries have monopoly power over many valuable assets, including local real estate, the monetary system, and the broadcast spectrum. If you want to broadcast in Bangladesh, you have to buy (or be given) a slice of the Bangladeshi broadcast spectrum.

Monopolists don't selling all they can at the lowest prices—depleting the very resources that give them the monopoly power. They restrict supply to obtain higher prices. Every profit-seeking private monopolist does this, but the institutions with the greatest power to become monopolists—the world's governments—usually fail to use this power over their resources. The people need to think not of unloading their precious resources at bargain prices, but of holding them back to see how much money they can get. Resources kept in their natural state are not going away. They maintain and often increase in value. I believe that one of the reasons so many governments have failed to take advantage of their price setting power is the reluctance to think of the people as owners. The assertion of monopoly power will follow naturally from the assertion of ownership.

3. The community should think like not just any monopolist; they should think like Johnny Carson. Who? In the late 1970s and '80s, he was the highest-paid television entertainer in the world.⁵⁰ His command over a huge audience gave him monopoly power, which he used first to demand more money, but at one point, he started turning down offers for more money in favor of more time off. He eventually reduced his workload to the point at which he worked only four days a week, eight months per year.

This isn't what most monopolists do with their businesses. If you have widget monopoly, and your machines can do nothing else but produce widgets, you work them as much as necessary to maximize your profit. Johnny Carson wasn't bargaining with a machine, he was bargaining with a resource that had tremendous nonmarket value—in this case his own time. The same is true for all natural resources and our environment as a system. This fact, so obvious to Johnny Carson, is apparently lost on most of the policymakers of the world. The wealthier he became from selling his time, the more time off he could afford. He restricted the supply of his time *beyond* the profit-maximizing point, because no amount of money was worth that much sacrifice of his time. We, as a community, need to apply this kind of thinking to our resources.

Our environment—left alone and unexploited—is the most important part of our endowment. If we do not leave our descendants a healthy environment, everything else we leave them is worthless. If we restrict supply beyond the

profit-maximizing point, we can have bigger parks, cleaner air, a healthier environment, and make a higher return from the resources that we do exploit. We aren't doing this now, partly because we don't have enough democracy, but also because we're not looking where the money is. Once we see the financial value of our resources, we need to realize they also have an inherent value much of which isn't worth being sacrificed for any amount of financial gain.

Of course we need to make sure that the terms of use are loose enough to allow individual flexibility in the projects they will pursue. Access to resources needs to be open to all people on the same basis without discrimination. And everyone has to have access to enough resources to afford the basics of life. But anyone who takes resources for their own needs to pay back to the community for those resources, and that payback must be sufficient to make the tradeoff valuable for us and for all our descendants.

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¹ Karl Widerquist and Michael W. Howard, eds., *Alaska's Permanent Fund Dividend: Examining its Suitability as a Model* (New York: Palgrave Macmillan, 2012).; Karl Widerquist and Michael W. Howard, eds., *Exporting the Alaska Model: Adapting the Permanent Fund Dividend for Reform around the World* (New York: Palgrave Macmillan, 2012).

² Becky Mansfield, ed. *Privatization: property and the remaking of nature-society relations* (Oxford: Blackwell, 2008).

³ Similar proposals include Peter Barnes, *With Liberty and Dividends for All: How to Save Our Middle Class When Jobs Don't Pay Enough* (San Francisco: Berrett-Koehler Publishers, 2014).; Mark Blyth and Eric Loneragan, "Print Less but Transfer More: Why Central Banks Should Give Money Directly to the People," *Foreign Affairs* 93, no. 5 (2014).; Gary Flomenhoft, "Applying the Alaska model in a Resource-Poor State: the Example of Vermont," in *Exporting the Alaska Model: Adapting the Permanent Fund Dividend for Reform around the World*, ed. Karl Widerquist and Michael W. Howard (New York: Palgrave Macmillan, 2012).; Karl Widerquist, "A Permanent Endowment for the United States," in *Exporting the Alaska Model: Adapting the Permanent Fund Dividend for Reform Around the World*, ed. Karl Widerquist and Michael W. Howard (New York: Palgrave Macmillan, 2012).; Karl Widerquist, "Exporting the Alaska Model to Alaska: How Big Could the Permanent Fund Be if the State Really Tried? And Can a Larger Fund Insulate an Oil-Exporter from the End of the Boom?," in *Exporting the Alaska Model: Adapting the Permanent Fund Dividend for Reform Around the World*, ed. Karl Widerquist and Michael W Howard (New York: Palgrave Macmillan, 2012)..

⁴ These institutional endowments are not *people's* endowments, because they are not set up to serve the interest of the people as a whole. Whose interest these endowments serve is an interesting issue, but off the topic of this chapter. I use them only as examples of how endowments can work.

⁵ National Association of College and University Business Officers and Commonfund Institute, "All Institutions Ranked by Fiscal Year 2002 Market Value of Endowment Assets With Percent Change Between 2001 and 2002 Endowment Assets,"

(Washington, DC: National Association of College and University Business Officers and Commonfund Institute, 2003).; National Association of College and University Business Officers and Commonfund Institute, "U.S. and Canadian Institutions Listed by Fiscal Year 2013 Endowment Market Value and Change in Endowment Market Value from FY 2012 to FY 2013," (Washington, DC: National Association of College and University Business Officers and Commonfund Institute, 2014).

⁶ Harvar-Management-Company, "The Mission of Harvard Management Company," Harvard University, <http://www.hmc.harvard.edu/>.

⁷ Mark Arsenault, "Harvard's holdings extend presence across the region," *The Boston Globe*, April 9, 2009 2009.

⁸ Thomas Piketty, *Capital in the Twenty-first Century* (Cambridge, MA: Harvard University Press, 2014).

⁹ Flomenhoft (2012).; Widerquist (2012).

¹⁰ Alaska-Permanent-Fund-Corporation, "Fund Market Value," Alaska Permanent Fund Corporation, <http://www.apfc.org/home/Content/home/index.cfm>.; Permanent-Fund-Dividend-Division, "Summary of Dividend Applications & Payments," Alaska Department of Revenue, <https://pfd.alaska.gov/DivisionInfo/SummaryApplicationsPayments>., averages are the author's calculations from the table.

¹¹ For further arguments along these lines, see Widerquist and Howard, *Alaska's Permanent Fund Dividend: Examining its Suitability as a Model* (2012).; Widerquist and Howard, *Exporting the Alaska Model: Adapting the Permanent Fund Dividend for Reform around the World* (2012).

¹² Brian Black, *Petrolia: The Landscape of America's First Oil Boom* (Baltimore, MD: The Johns Hopkins University Press, 2000).

¹³ Sovereign-Wealth-Fund-Institute, "Sovereign Wealth Fund Rankings," Sovereign Wealth Fund Institute, <http://www.swfinstitute.org/fund-rankings/>.

¹⁴ Norges-Bank, "Government Pension Fund Global Quarterly Report," NORGES BANK INVESTMENT MANAGEMENT.

¹⁵ International-Monetary-Fund, "World Economic Outlook Database, April 2013," International Monetary Fund, <http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/weorept.aspx?sy=2012&ey=2012&scsm=1&ssd=1&sort=country&ds=.&br=1&pr1.x=35&pr1.y=14&c=512%2C666%2C914%2C668%2C612%2C672%2C614%2C946%2C311%2C137%2C213%2C962%2C911%2C674%2C193%2C676%2C122%2C548%2C912%2C556%2C313%2C678%2C419%2C181%2C513%2C867%2C316%2C682%2C913%2C684%2C124%2C273%2C339%2C868%2C638%2C921%2C514%2C948%2C218%2C943%2C963%2C686%2C616%2C688%2C223%2C518%2C516%2C728%2C918%2C558%2C748%2C138%2C618%2C196%2C522%2C278%2C622%2C692%2C156%2C694%2C624%2C142%2C626%2C449%2C628%2C564%2C228%2C283%2C924%2C853%2C233%2C288%2C632%2C293%2C636%2C566%2C634%2C964%2C238%2C182%2C662%2C453%2C960%2C968%2C423%2C922%2C935%2C714%2C128%2C862%2C611%2C135%2C321%2C716%2C243%2C456%2C248%2C722%2C469%2C942%2C253%2C718%2C642%2C724%2C643%2C576%2C939%2C936%2C644%2C961%2C819%2C813%2C172%2C199%2C132%2C733%2C646%2C184%2C648%2C524%2C915%2C361%2C134%2C362%2C652%2C364%2C174%2C732%2C328%2C366%2C258%2C734%2C656%2C144%2C654%2C146%2C336%2C463%2C263%2C528%2C268%2C923%2C532%2C738%2C944%2C578%2C176%2C537%2C534%2C742%2C536%2C866%2C429%2C369%2C433%2C744%2C178%2C186%2C4>

36%2C925%2C136%2C869%2C343%2C746%2C158%2C926%2C439%2C466%2C916%2C112%2C664%2C111%2C826%2C298%2C542%2C927%2C967%2C846%2C443%2C299%2C917%2C582%2C544%2C474%2C941%2C754%2C446%2C698&s=GGXWDN_NGDP%2CGGXWDG_NGDP&grp=0&a=.

¹⁶ Mary Ann Tétreault, Gwenn Okruhlik, and Andrzej Kapiszewski, *Political change in the Arab Gulf States: stuck in transition* (Lynne Rienner Publishers, 2011). I won't discuss this issue because it will take me off the topic at hand. It ought to go without saying that an endowment is only a people's endowment if it is owned and managed by a democratic authority that is closely responsible to the people. Many nations with SWFs also have a problem with the treatment of migrant laborers, but an examination of that issue would take us even further afield.

¹⁷ Gregg Erickson and Cliff Groh, "How the APF and the PFD Operate: The Peculiar Mechanics of Alaska's State Finances," in *Alaska's Permanent Fund Dividend: Examining its Suitability as a Model*, ed. Karl Widerquist and Michael W. Howard (New York: Palgrave Macmillan, 2012), Table 3.1, 43

¹⁸ Qatar for example receives more than 70 percent of government revenue from hydrocarbons and another 10 percent from business taxes, much of which is directly or indirectly related to hydrocarbons. International-Monetary-Fund, *IMF Country Report No. 10/62* (Washington, DC: International Monetary Fund, 2010), table 13, p. 10.

¹⁹ Flomenhoft (2012).

²⁰ Erickson and Groh (2012).

²¹ Todd Moss, ed. *The Governor's Solution: How Alaska's Oil Dividend Could Work in Iraq and Other Oil-Rich Countries* (Washington, DC: Center for Global Development, 2012), 76, 86 n18.

²² Author's calculations assuming a population of 700,000 and a real return rate of 4 percent.

²³ David L Roberts and Andrew R Solow, "Flightless birds: when did the dodo become extinct?," *Nature* 426, no. 6964 (2003).

²⁴ Jay Hammond, *Tales of Alaska's bush rat governor* (Epicenter Press, 1996).

²⁵ Widerquist (2012).

²⁶ David A Rose, *Saving for the Future: My Life and the Alaska Permanent Fund* (Kenmore, WA: Epicenter Press, 2008).

²⁷ Paul Segal, "Alaska's permanent fund dividend as a model for reducing global poverty," in *Exporting the Alaska Model: adapting the permanent fund dividend for reform around the world*, ed. Karl Widerquist and Michael W. Howard (New York: Palgrave Macmillan, 2012); Jason Hickel, "Constituting the commons: oil and development in post-independence South Sudan," in *Exporting the Alaska Model: Adapting the Permanent Fund Dividend for Reform Around the World*, ed. Karl Widerquist and Michael W. Howard (New York: Palgrave Macmillan, 2012); Michael L Ross, "The political economy of the resource curse," *World politics* 51, no. 02 (1999).

²⁸ As documented in Piketty (2014).

²⁹ Flomenhoft (2012), 96-98.

³⁰ *Ibid.*, 106.

³¹ In the United States for example, public ownership is asserted in 73d-Congress-of-the-United-States, "Communications Act of 1934," in *Public Law No. 416*, ed. 73d Congress of the United States (Legal Information Institute, 1934), §301.

³² Flomenhoft (2012), 100.

³³ J. H. Snider, *An Explanation of the Citizen's Guide to the Airwaves* (Washington, DC: New America Foundation, 2003), 12.

³⁴ *Ibid.*, 12.

³⁵ Matthew Sherman, *A short history of financial deregulation in the United States* (Washington, DC: Center for Economic and Policy Research, 2009).

³⁶ Flomenhoft (2012)..

³⁷ Widerquist (2012).

³⁸ Blyth and Lonergan (2014).

³⁹ I know of uses of this term going back at least as far as John Locke, *Two Treatises of Government* (Cambridge: Cambridge University Press, 1960), Second Treatise, Chapter 5, section 37.

⁴⁰ JS Hoffman and JB Wells, "Environmental regulations on chlorofluorocarbons," *International Journal of Thermophysics* 10, no. 3 (1989).

⁴¹ Howard T Odum, *Environmental accounting* (Oxford: Wiley, 1996).; Martin Reginald Mathews, "Twenty-five years of social and environmental accounting research: is there a silver jubilee to celebrate?," *Accounting, Auditing & Accountability Journal* 10, no. 4 (1997).; David Owen, "Chronicles of wasted time?: A personal reflection on the current state of, and future prospects for, social and environmental accounting research," *Accounting, Auditing & Accountability Journal* 21, no. 2 (2008).

⁴² Adam Smith, *The Wealth of Nations* (Oxford: Oxford University Press, 1976).

⁴³ Paul S. Martin, *Twilight of the Mammoths: Ice Age Extinctions and the Rewilding of America* (Berkeley: University of California Press, 2005).; Paul S. Martin and R. G. Klein, eds., *Quaternary Extinctions: A Prehistoric Revolution* (Tucson: University of Arizona Press, 1984).

⁴⁴ Adapted from Karl Widerquist and Michael W Howard, "Lessons from the Alaska Model," in *Alaska's Permanent Fund Dividend: Examining its Suitability as Model*, ed. Karl Widerquist and Michael W Howard (New York: Palgrave Macmillan, 2012).

⁴⁵ The now-standard account of that we mean when we use the word "ownership" defines it as a bundle of 11 rights and duties Tony Honoré, *Making Law Bind* (Oxford: Oxford University Press, 1987), 161-192.

⁴⁶ Garrett Hardin, "The Tragedy of the Commons," *Science* 162, no. 3859 (1968).

⁴⁷ David Feeny et al., "The Tragedy of the Commons: Twenty-two years later," *Human Ecology* 18, no. 1 (1990).

⁴⁸ Roberts and Solow (2003).

⁴⁹ J. R. Williams and R. W. Hann, *Optimal Operation of Large Agricultural Watersheds with Water Quality Restraints*, vol. Technical Report No. 96 (College Station, TX: Texas Water Resources Institute, Texas A & M University, 1978).

⁵⁰ Norris McWhirter, *Guinness Book of World Records, 1983* (New York: Sterling Publishing Co., Inc., 1982).